

APR 22 1920

# Medical Times

A Monthly Journal of Medicine, Surgery and the Collateral Sciences

Published by THE MEDICAL TIMES COMPANY at 95 Nassau Street

VOL. XLVIII., No. 4

NEW YORK, APRIL, 1920

Fifteen Cents a Copy  
One Dollar a Year

## CONTENTS

### GENERAL SCIENTIFIC.

Sterility .....	77
CHARLES EDWARD PANOFF, M.D., Brooklyn.	
Psychology in Medical Jurisprudence....	83
JUSTICE EDWARD R. FINCH, New York.	
A Remarkable Case of Gun Shot Wound of the Chest .....	88
HOWARD LILIENTHAL, M.D., New York.	
The Influence of Mind as a Factor in the Practice of Medicine .....	89
W. F. McNUTT, Sr., M.D., San Francisco.	
Odds and Ends in Tonsil Surgery.....	90
MAX LUBMAN, M.D., New York.	

Established 1872

The Patulous Eustachian Tube.....	92
HAROLD M. HAYS, M.D., New York.	
THE MAN YOUNG AT FIFTY.	
The Nervous Invalid as a Factor in Society .....	92
J. MADISON TAYLOR, M.D., Philadelphia.	
THE DIAGNOSTIC LABORATORY .....	95
CORRESPONDENCE .....	96
EDITORIAL.	

The Physicians' Home .....	97
Thoughts on Alcohol .....	97
"The Wages of a Plumber Would Do"...	97
Too Late! .....	98
A Telling Phrase .....	98
A Travesty on Public Morals .....	98
MISCELLANY.	
God Rest Ye, Merry Gentlemen.....	98
SOCIETY PROCEEDINGS ....	99
DIAGNOSIS AND TREATMENT .....	99

Entered at the New York Post Office as Second Class Matter.

## GASTRON AT THE THRESHOLD

To gastric juice Nature assigns the role of a powerful antiseptic.

GASTRON, an extract of the actual tissue juice of the entire stomach mucosa, contains all the soluble, the activable constituents of the gastric juice itself in a carminative agreeable solution with 0.25 per cent. hydrochloric acid, organically bound.

At the threshold of the digestive tract Gastron may be utilized as a physiological recourse against fermentative dyspepsia, to supplement and fortify impaired digestion.

Gastron is alcohol free.

**FAIRCHILD BROS. & FOSTER, New York**

## FELLOWS' SYRUP

Differs from other preparations of the Hypophosphites. Leading Clinicians in all parts of the world have long recognized this important fact.

HAVE YOU?

To Insure Results,  
**PRESCRIBE THE GENUINE**

By Syr. Hypophos. Comp. FELLOWS'

REJECT < Cheap and Inefficient Substitutes  
Preparations "Just as Good"

THE FELLOWS' MEDICAL MANUFACTURING CO.  
NEW YORK, N. Y.

## FALSE DOCTRINE-- "Giving the Wrong Medicine to a Sick Man"

There is much false doctrine regarding the use of antiseptic solutions, especially on mucous membranes. The best antiseptic is the normal secretion of the part involved. The next best is ALKALOL because ALKALOL being hypotonic *does not* overstimulate cell secretion and favor catarrh of secretory cells.

ALKALOL supplies needed physiologic salts and passes them into the cells, it feeds them. Of proper alkalinity and correct salinity ALKALOL is soothing and healing, overcomes congestion, restores osmotic balance. ALKALOL doctrine is rational, true doctrine whose promise is demonstrated and justified by performance.

*Sample and "How and Why" literature on request.*

**THE ALKALOL CO. Taunton, Mass.**

**USE—**

# "Horlick's"

**— the Original and Genuine —**

Recognized as Standard by the medical profession, who, for over a third of a century, have proven its reliability in the feeding of infants, nursing mothers, convalescents and the aged.

*Samples prepaid upon request*

**Horlick's Malted Milk Co.  
Racine, Wis.**

# Medical Times

A Monthly Journal of Medicine, Surgery, and the Collateral Sciences

Vol. XLVIII., No. 4

New York, April, 1920

Fifteen Cents a Copy  
One Dollar a Year

## Board of Contributing Editors

WM. G. ANDERSON, M.Sc., M.D., Dr.P.H....New Haven, Conn.  
SETH SCOTT BISHOP, M.D., LL.D.....Chicago, Ill.  
JOHN W. BOWLER, A.M., M.D.....Hanover, N. H.  
GEORGE F. BUTLER, A.M., M.D.....Winnetka, Ill.  
EDWARD E. CORNWALL, M.D.....Brooklyn, N. Y.  
KENNON DUNHAM, M.D.....Cincinnati, O.  
W. L. ESTES, M.D.....South Bethlehem, Pa.  
HAROLD HAYS, A.M., M.D., F.A.C.S.....New York  
ALFRED K. HILLS, M.D.....New York  
JOHN J. KYLE, A.M., M.D.....Los Angeles, Cal.  
HOWARD LILIENTHAL, M.D., F.A.C.S.....New York  
EDWARD H. MARSH, M.D.....Brooklyn, N. Y.

ROBERT T. MORRIS, A.M., M.D., F.A.C.S.....New York  
HENRY H. MORTON, M.D., F.A.C.S.....Brooklyn, N. Y.  
GEORGE THOMAS PALMER, M.D.....Springfield, Ill.  
JOHN O. POLAK, M.Sc., M.D., F.A.C.S.....Brooklyn, N. Y.  
JOHN PUNTON, A.M., M.D.....Kansas City, Mo.  
COL. IRVING W. RAND, M.D., U.S.A. .Fort D. A. Russell, Wyo.  
CHARLES S. ROCKHILL, M.D.....Cincinnati, O.  
DUNBAR ROY, M.D.....Atlanta, Ga.  
DUDLEY A. SARGENT, M.D.....Cambridge, Mass.  
ALBERT H. SHARPE, M.D.....New Haven, Conn.  
JOHN P. SPRAGUE, M.D.....Chicago, Ill.  
ALMUTH C. VANDIVER, B.S., LL.B.....New York

REYNOLD WEBB WILCOX, M.D., LL.D., D.C.L.....New York

## General Scientific

### STERILITY.

CHARLES EDWARD PANOFF, M.D.,  
Brooklyn

Prior to 1784, it was known that semen was a necessary factor in the process of impregnation. That the semen contained spermatozoa was also known, for they were first observed as far back as 1677, by Hamm, a pupil of Leuwenhock's, who directed the latter's attention to them; but Leuwenhock did not understand their significance or their function. This remained unknown until Spallanzani, in 1784, made the discovery, that if you filtered semen, thus removing the spermatozoa, that such filtered semen was sterile. Therefore he came to the natural conclusion, that the spermatozoa was an important element in the semen, and they were the cause of impregnation. Where the spermatozoa came from was not known until 1841, when Kolliker made the discovery that they came from the cells of the testis. It then remained for Barry to prove that it was the conjugation of the sperm and the ovum that caused impregnation. This he did in 1843, when he observed such a union in the rabbit.

In spite of this knowledge concerning impregnation, it has only been within recent years that the medical profession in general, and the obstetricians and gynecologists in particular, have come to the conclusion that the male genital secretions were necessary factors in the process of impregnation, and that as such they ought to be considered in a given case of sterility. Let me emphasize this. Up to very as husband and wife, with the full sanction of the laws of society, state and the church, had no children, the woman was blamed for the barrenness, and to overcome this condition she was dilated, curetted, tamponed, medicated and I might add tortured; while the man, her lord and master, was left out of consideration as a possible factor, simply because he, being of the superior type, must be able to perform the required sexual duties. Now it is recent times if a man and a woman living together must be considered from the stand that the wife and the husband, individually or collectively, might be

the cause; and instead of the woman taking first place in such a consideration, her lord and master has usurped her former position. The woman must not be considered as a factor until it has been proven that the husband is not the responsible party; and his responsibility does not end with the mere knowledge that the can manufacture spermatozoa bearing semen. He must prove that he is able to perform the complete sexual act; and by the complete sexual act I mean he must prove that is capable of having, and that he has, good, hard, lasting erections; that he is able to introduce such a member into the vagina; that he can perform the necessary copulatory movements; that he is able, and that he does ejaculate his spermatozoa bearing semen, somewhere in the neighborhood of the cervical os; and that he is having pleasure while doing all this. Being able to do all this his responsibility does not end. He must, in addition, be able to so stimulate his sexual partner that she shall have a stage of erection, which shall correspond as near as possible to his; he must be able to stimulate her that she shall desire the sexual embrace as much as he does; he must be able to so perform the sexual act that she shall have a stage of orgasm which must correspond in intensity to his; and finally he must be able to so stimulate her that she shall enjoy as much pleasure during the performance of the act as he does. If he can fulfill all these requirements he is not responsible for the sterility. If he fails in any one of these necessary factors, so essential to a happy and fruitful climax, he is the guilty party, and until he overcomes one or all of his errors the wife is not to be considered a party to the sterility.

How are we to prove the husband guilty or innocent of the charge that he is the one responsible for the sterility. Before undertaking such a task one must know and understand the following:

- 1st. That a man may be potent and fertile.
- 2nd. That a man may be potent and sterile.
- 3rd. That a man may be impotent and fertile, and
- 4th. That a man may be impotent and sterile.

A man is considered impotent when he is unable to perform the entire sexual act.



A man is considered potent when he can perform the entire sexual act.

A man is considered sterile when his semen does not contain spermatozoa.

A man is considered fertile when his semen does contain spermatozoa.

Accepting the above classifications and definitions, how can we examine a man for potency or impotency. I know of no method by which one can examine a man and woman and prove that they possess all the necessary capabilities. We could make the diagnosis with the aid of moving pictures and the phonograph, but as yet we have not arrived at that stage where we can adopt them. We try to make a diagnosis of potency or impotency from the history of the patient, relying upon his honesty.

If these statements are endorsed by the wife it adds materially in making the diagnosis. However, if the man says he is impotent, and if the wife corroborates it the diagnosis is made. It is then incumbent upon the physician to ascertain and to correct it if possible. It is much easier to determine whether a man is fertile or sterile than it is to decide whether he is impotent or potent. Here we have something definite to work on. The examination of the semen decides the question.

Always remember that if a man is potent and fertile, and if he has a wife that is sexually normal, that they will procreate, and will not require professional services. If the wife is below par sexually they might be unable to have children and they need advice.

Also remember that an impotent and fertile man may not seek your advice, as far as sterility is concerned, providing he has a wife of the voluptuous type. Being the possessor of such an excess of mechanical sexual ability all the assistance she requires from her husband is for him to furnish the necessary spermatozoa, and to deposit them anywhere along the genital tract.

Let us assume we have a patient who desires to find the cause for existing sterility. It is my routine plan to divide the examination of such cases into five parts:

1. History. 2. Physical examination. 3. Microscopical examination of the genito-urinary secretions. 4. Examination of the semen (Condom specimen). 5. Examination for spermatozoa in situ.

1. History. This is divided into two groups:

Group 1. Name—age—how long married—

Brothers married—how long—any children—

Sisters married—how long—any children—

Age of wife—any relationship outside of marriage—

Brothers married—how long—any children—

Sisters married—how long—any children—

Length of the engagement—

Let us analyze this group of questions. The name and age of the patient and how long married are of general interest only, and gives a clue to how long the sterility has existed. Whether he has any married brothers and sisters, and whether they have any children is important. It tells us whether he comes from a family of producers or non-producers. He will follow in the footsteps of the brothers rather than the sisters. The age of the wife is only of importance to see if there is not too great a difference between their ages. To see if they are properly mated, as far as age is concerned.

Whether there is any relationship outside of marriage, and how near such a relationship is if it exists is important. It is a well-known fact that breeding under such conditions is of a poor character, both regarding quantity and quality. The question whether the wife has any married brothers and sisters, and if they have any children has the same bearing on the case as the previous questions regarding the husband's brothers and sisters.

The question concerning the length of the engagement period is of interest. Long engagements are detrimental to the future sexual life of the parties concerned. Such a detriment could explain the sterility. The unsatisfied sexual excitements that accompany all engagements, and particularly long ones, might be the direct cause of some inflammatory condition in the genital tract of the husband or the wife, and such a condition could easily be the cause of the sterility. It is understood that the only means that we have to determine this question is an exploratory laparotomy. We cannot examine her secretions as we do those of the male. From the information given, whether the wife has miscarried or skipped any periods, we are able to conclude that impregnation can take place but that fertilization, the next step, does not occur, or that it is interfered with.

**A. Intercourse Before Marriage.**—Some patients will say they never indulged in intercourse before marriage. Others say they indulged at very long intervals, either because they had no desire (if such is the case it is worth while recording, such an individual is of a lowered sexual type, and he will, as a rule, be the cause of the sterility, for the simple reason that being of such a type he cannot perform the act properly) or that they curbed their normal sexual desires to prevent the possibility of contracting some venereal disease. This curbing of the sexual impulses, in some cases, is just as harmful as if free rein was given to them. If a patient admits regular sexual relationship; find out what he considers regularity, and at what age he commenced.

**B. Masturbation.**—Masturbation in itself is not a cause of impotency or sterility. It only becomes a cause when it has been practiced to excess. The question to decide in each particular case is if it has been used to excess. Masturbating once a week might be all right for A, but all wrong for B, just the same as sexual intercourse once a week might be all right for C and all wrong for D. The earlier in life the individual commenced to masturbate the better are the chances that he has overdone the act, and that he is suffering from the results. Find out if he still masturbates, and, if he does, under what conditions. Many married men derive more pleasure from masturbating than they do from the normal sexual act.

**C. Coitus Interruptus.**—Find out if it was ever practiced. If it was, for what length of time, and why, and if it is still being practiced. Coitus interruptus as a rule is not harmful to the man, for the simple reason, that as far as he is concerned, he almost performs the complete sexual act. If the practice does cause him any trouble it will have a nervous base, for during the act his mind is set on the period of ejaculation, and his entire body cannot be in that necessary complete state of harmony. The practice of coitus interruptus is very harmful to the wife. One can readily see what her condition must be, both mentally and physically.



**D. Pollutions.**—Some interesting facts can be obtained from the histories of pollutions. Pollutions that come nocturnally, at regular intervals, with a reasonable length of time between them, and are accompanied by a normal sexual dream, and the patient feeling none the worse for having had the pollution, are perfectly normal. If they come at frequent and irregular intervals, or during the day, or if they are accompanied by dreams of a perverse sexual character, they are pathological and need attention. Such pollutions are always accompanied by some pathological condition in the prostate, the vesicles and the verumontanum. A patient that is afflicted with abnormal pollutions, with its accompanying conditions, cannot perform the sexual act properly, which is sufficient to blame him for the sterility.

**E. Prostatorrhoea—Spermatorrhoea.**—A history of these conditions leads to the conclusion that there is some trouble in the prostate, vesicles or verumontanum. These three conditions go together. Having such trouble the patient cannot perform the sexual act properly, and, being unable to do so, makes him the primary factor in the existing sterility.

**F. Erections.**—Question the patient regarding the character of his erections. Poor erections and the conditions that result from them are accountable for the sterility present.

**G. Ejaculations.**—Find out if they are mature, premature or retarded. The only kind to consider as a possible factor in the sterility are the premature one. If the cases of premature ejaculation could acquire the habit of retardation it would cure the sterility.

**H. Wife—Frigid or Voluptuous.**—Find out from the patient to which class his wife belongs. If of the frigid class question him as to what means, if any, he uses to arouse her feelings. We are often surprised at the ignorance that some men display regarding this question. To educate the husband along these lines I give him a book written by a physician for study by both husband and wife.

**I. Orgasm.**—While there are some women who become impregnated without ever experiencing an orgasm, the majority cannot orgasm is most necessary to a successful impregnation. While the cervix is being lowered the cervical os opens and closes. By this means the cervix protrudes its mucous plug. This plug mixes with the spermatozoa bearing semen. Turning the stage of relaxation and return to normal, the mucous cervical plug, with the adherent spermatozoa, is drawn up into the cervical canal. This can only happen where the act has been properly performed.

**J. Position During the Act.**—Where there are abnormalities of the genital parts the patients must be instructed as to the correct position, as this may correct the sterility.

**K. Frequency of the Act.**—A good rule to follow is once or twice a month, seven to twelve days after the menstrual period.

**Physical Examination.**—I never question a patient regarding any venereal trouble. When I have examined him and then confront him with the news that he has, or has had some venereal trouble it leaves a favorable impression on the patient regarding one's ability.

Examine the penis, as to size, abnormalities and deformities, conditions that might interfere with performance. Look for scars, the remains of chancres or chancroids. If present insist upon a Wassermann.

See if there are any indurations left, the result of bygone epididymitis, gonorrhoeal, tubercular or syphilitic in origin. Note if there is any marked degree of varicocele present. Of all these the most important is the finding of indurations in the epididymii. If only one side is obstructed the better the prognosis. The French have an apt saying, "one testicle is a necessity, two a luxury." If both sides are plugged it is impossible for the spermatozoa to reach the vesicles. They cannot become a part of the semen, and this means sterility. Operative measures relieve this condition in about 40% of cases. It is worth while trying, especially if a puncture of the testis shows that spermatozoa are being manufactured.

Examine the urine for shreds, particular prostatic; also for albumen, sugar, casts, epithelium and pus.

The next step in the physical examination is the manual examination of the prostate. Note the size, density and mobility. Massage the prostate and vesicles. Examine the expression microscopically. If the prostate is normal only prostatic cells will be found. If able to massage the normal vesicles one should find spermatozoa alive or dead. If the prostate is the seat of some trouble pus will be found. The number of pus cells found in a field will determine the severity of the case. The finding of 5 to 10 pus cells to the field, with the 1/6 objective, would indicate a case of the first degree; 10 to 20, the second degree; 20 to 30, the third degree, and 30 plus, the fourth degree. It is important to find out what degree is present in the case under consideration, so that we can compare it with subsequent findings to see how much progress is being made in the treatment of the case.

Stain the expression for bacteria. Do not be disappointed if the gonococcus is not seen. Being the cause of a prostatitis is one thing and finding them in a stained prostatic expression is another. Other bacteria are more easily found. Because a patient has a prostatitis and because one finds pus does not mean that it is of venereal origin. A non-venereal prostatitis can be caused by sexual irregularities, by direct infection from the bowel, or by indirect infection by means of the blood, or by some constitutional trouble, like tuberculosis or syphilis. No matter what causes the prostatitis it may be the chief factor in the sterility; either because he cannot perform the sexual act properly as the result of this condition, or because the diseased prostatic secretions kills the spermatozoa, or it lessens their motile power to such an extent that they are unable to reach their destination. Diseased prostatic secretions may be responsible for some inflammatory condition along the genital tract of the female. As a result of such a condition impregnation cannot take place.

During the microscopic examination of prostatic and vesicular expressions look for crystals. The fewer the crystal the better the chances for fertility. Finding nothing but crystals makes that case hopeless.

This completes the examination of the patient at this visit. He is now instructed how to use a condom and how to bring the condom specimen of semen to the office for examination.

Before examining the condom specimen of semen at the second visit, in any case of sterility, make sure that the specimen is the specimen from the man in question. Have the wife accompany him. Always have the semen brought to you as soon as possible.

sible. Within two hours is a good working rule. It is not necessary to take special measures to keep the semen warm. First, estimate the quantity. It should be about a dram.

It is best to instruct him not to have intercourse for several days prior to the one the specimen of which is to be examined. Examine the gross appearance of the semen, whether it is thick and starchy or thin and watery. The longer the period between the time of the ejaculation and the examination the more watery the specimen. If the semen remains thick and starchy for one hour after the ejaculation we are sure that such a semen ought to retain its consistency and good qualities for that length of time, and even longer in the female genital tract. The amount of alkalinity of the semen is judged by the depth of the color of the litmus paper test. The stronger the color the more alkaline the semen, and the more alkaline the semen the more chance for the spermatozoa to retain their life and motile power.

Next examine the semen microscopically. If we find spermatozoa, no matter how many, the patient is fertile. If none are found he is sterile. To be sure that he is sterile examine several specimens. Finding no sperm completes the examination of that specimen. We know that he is sterile. The next thing to do is to find out the cause of the sterility and to correct it if possible.

If the semen contains spermatozoa find out their condition. Estimate the number present. It has been estimated that the number of spermatozoa ejaculated at one time is about 19 million. Using this number as a basis, we can judge if the specimen is up to standard. Note the motile power of the spermatozoa. See how long it takes a spermatozoa to travel a certain distance, and by the length of time it takes to travel that distance you ought to be able to estimate its approximate motive power within the female genital tract. It is necessary to have an idea of this power, for after they are drawn up into the cervix it is this motility that enables them to travel onwards to meet the ovum.

See if the spermatozoa are alive or dead. If dead we must determine whether they were killed inside or outside of the body. If their tails are curled they died within the body; if straight, outside.

The presence or absence of crystals is next to be looked for. The more crystals the less chance of spermatozoa being present. If they are present they will be of poor quality. The formation of these crystals is governed by the same laws that control the formation of all crystals. Crystals cannot form in an active medium. Thus the presence or absence of crystals can be used to judge the activity and the amount of spermatozoa present in the specimen of the semen. The motile power of good, live, active responsible spermatozoa must be such that it would prevent the formation of crystals for at least one hour. If crystals are found within that time, and if there is also present a good amount of dead, straight tailed spermatozoa, we must assume that the life and therefore the motile power of the sperm is below par, and being below par in the condom specimen it would of course be insufficient in the female genital tract, for them to travel against the cilia of the epithelium of the uterus, which they must be able to do, in order to meet the ovum, and cause impregnation.

Stain the semen for bacteria. This is done to

confirm the findings of the stained prostatic and vesicular expressions. This is also done by the finding of pus cells, blood cells and epithelium.

The main thing in the examination of the semen is the finding of spermatozoa. That decides whether a man is sterile or fertile. The diagnosis that can be made from the examination of the condom specimen of semen is that the man is sterile or fertile. If he is sterile the testicles are not manufacturing spermatozoa, or if spermatozoa are being manufactured they are unable to leave the testicles on account of some obstruction in the epididymis. The way to find out if the testicles are manufacturing spermatozoa is to aspirate them, and to examine the aspirated fluid for the sperm. The treatment in a case where no sperm is found would consist in stimulating the spermatogenetic power of the testicle. This can be done in some cases by the administration of testicular extract, either alone or in combination with some of the other glandular extracts. At the same time the prostate is treated by massage. It has been proven that the prostate is a gland with an internal secretion, and that this secretion has something to do with the process of spermatogenesis.

If the aspirated fluid from the testicles shows the presence of spermatozoa we must then assume that they are being manufactured, but are unable to reach the vesicles. This we know is due to obstruction in the epididymis, and calls for operative means to rectify it.

If the examination of the condom specimen shows that the man is fertile such a finding does not rule him out as a possible factor to the sterility. He is still to be considered as such until it is proven that he is able to deposit such fertile semen in the proper place, and that he is able to properly perform the complete sexual act.

In order to find out these necessary factors the wife must be examined for his spermatozoa. From such an examination we can learn the following:

- 1st. If the semen has been deposited in the proper place.
- 2nd. If the woman is doing her share of the mechanism of the act.
- 3rd. If her genital secretions are beneficial or harmful to the spermatozoa, and
- 4th. If the husband is performing the complete sexual act.

For the proper examination of spermatozoa in situ, the couple are instructed to have intercourse a few days after the examination of the condom specimen. This enables the husband to produce some more good, spermatozoa bearing semen. They are also instructed not to use a condom. After the completion of the act the wife must remain on her back for one hour. The wife, accompanied by the husband, presents herself for the examination about two hours after the completion of the act.

**Spermatozoa in Situ.**—The wife is examined for spermatozoa in the following places:

- 1st. The vaginal outlet and the vulva.
- 2nd. The posterior cul de sac.
- 3rd. The region of the cervical os.
- 4th. The cervical canal.

Let us now interpret some of the findings.

#### Examination for Spermatozoa in Situ.

##### Class A.

- 1st. Vaginal outlet and vulva, numerous dead straight tailed spermatozoa found.



- 2nd. Posterior cul de sac, no spermatozoa found (dead or alive).
- 3rd. Cervical os, no spermatozoa found (dead or alive).
- 4th. Cervical canal, no spermatozoa found (dead or alive).

**Diagnosis.**—The husband is the cause of the sterility due to premature ejaculations. We know that he is fertile (condom specimen). On account of the premature ejaculations he is unable to deposit his semen in the proper place, as shown by 1 and 2.

**Treatment.**—Massage prostate, treat verumontanum, general tonic treatment. Internal secretions.

#### Class B.

1. Vaginal outlet and vulva. Numerous dead straight tailed spermatozoa found.
2. Posterior—cul de sac. Few dead straight tailed spermatozoa found.
3. Cervical os. None found (dead or alive).
4. Cervical canal. None found (dead or alive).

**Diagnosis.**—The husband is able to deposit fertile sperm in the proper place, as shown by the findings at 2. But through some faulty construction of the female parts, or through faulty posture during the act most of the semen escaped from the posterior cul de sac. This is shown by the findings at 1 as compared to 2.

Also the woman did not or could not perform her part of the act. This is proven by the fact that no spermatozoa were found at 3 and 4. Another way that we can explain their absence at these places is that the sperm did not have time enough to get there; that they were forced from the posterior cul de sac before they had a chance to get to the cervical os and canal.

**Treatment.**—Correct the posture if this was the reason for the escape of semen. Correct deformities existing in the female genital tract. Best of all advise means to be taken that will prevent the escape of the semen. Use a plug, natural or artificial. The natural plug would be the penis, which should not be withdrawn from the vagina until the woman has her orgasm. If the penis cannot be used make use of an artificial one, made out of a condom, been filled with cotton, and is inserted into the vagina. It can be retained until the following morning. That ought to be sufficient time to demonstrate the theory that the sperm can get into the cervical canal by their own motive power.

#### Class C.

1. Vaginal outlet and vulva. Few dead straight tailed sperm found or none found.
2. Posterior cul de sac. Abundant live active sperm found or  
Abundant straight tailed dead sperm found, or  
A combination of both found.
3. Cervical os. None found (dead or alive).
4. Cervical canal. None found (dead or alive).

**Diagnosis.**—That the husband is able to manufacture and deposit good spermatozoa bearing semen in the proper place.

The finding of abundant live and active spermatozoa at 2 shows that the secretions of the vagina are not detrimental to them or that the acidity of the vaginal secretions was not sufficient to overcome the alkalinity of the semen, therefore the vaginal secretions did not have

the power to kill them, as it should have done within a period of two to three hours. If the finding was only dead sperm the diagnosis is that the vaginal secretion is killing them.

If dead and live sperm are found, we can assume that the vaginal secretions are only partly to blame for the sterility. Finding no sperm at 3 and 4 means that the mechanical part of the act as performed by the wife is at fault.

Faulty position of the cervix, even if the act was performed properly, would also account for the absence of sperm at 3 and 4.

**Treatment.**—To overcome the acidity of the vaginal secretions alkaline douches are prescribed. These douches are to be taken before the commencement of the sexual act. Sometimes the artificial alkalization of the vaginal secretions helps to overcome the sterility. The failures might be attributed to the fact that we are unable to estimate the acidity of the vaginal secretions. It is impossible to collect sufficient to make the necessary tests. So not knowing the amount of the acidity it is all guess work, in prescribing the strength of the alkaline douch. If we were to work on the basis that the acidity of the secretion is 100%, and then use an alkaline douch of 100%, such a douch would, if it did not overcome the acidity, at least neutralize it, but a 100% alkaline douche to prevent conception seems to be more successful than the use of alkaline douches to assist it.

To overcome the faulty mechanism of the sexual act, the husband and the wife are instructed how to perform it properly. It is in this group of cases that the sexual mechanism of the woman is to blame for the sterility.

Correct faulty positions of the cervix, by operative means. We can also advise the use of different postures, that will allow the deposit of semen near the cervical os, or that will allow the cervix to dip down into the seminal pool.

#### Class D.

1. Vaginal outlet and vulva, few dead straight tailed sperm found or none found.
2. Posterior cul de sac, few dead straight tailed sperm found, or few live sperm found, or a combination of the two found.
3. Cervical os, live spermatozoa found.
4. Cervical canal, none found (dead or alive).

**Diagnosis.**—The husband is ruled out by the findings at 1 and 2.

The finding of dead sperm at 2 has already been interpreted.

The same implies to the finding of live sperm at 2.

The finding of live sperm at 3 shows that the mechanical part of the act as far as the cervical os is concerned has been performed properly; that is, the act, as performed, was sufficient to cause the cervix to dip down into the ejaculated semen. That some of the semen adhered to it is proven by the findings at 3.

Also the finding of live sperm at 3 shows that the vaginal secretions, the cervical secretions and possibly the uterine secretions were not detrimental to them.

Finding no spermatozoa at 4, either alive or dead, signifies that the part played by the cervix; that is in opening and closing, so as to



protrude the mucous plug, was not being performed. If it was, we would have found sperm there (at 4) just as we did at 3.

The live sperm found at 3 might eventually find their way into the cervical canal by the use of their own motive power, but up to the time of examination they did not do so, as was shown by the findings at 4.

**Treatment.**—Correct the mechanism of the act. This has already been described.

#### Class E.

1. Vaginal outlet and vulva, few dead straight tailed sperm found or none.
2. Posterior cul de sac, few dead straight tailed sperm found or few live sperm found, or combination of the two.
3. Cervical os, dead sperm found straight tailed.
4. Cervical canal, none found (dead or alive).

**Diagnosis.**—The findings at 1 and 2 have been diagnosed in the previous classes. The finding of dead sperm at 3 means that the mechanical part of the act as far as 3 is concerned, is normal. The dead sperm can be accounted for as follows. The finding of dead sperm at 2 would account for the finding of dead sperm at 3, but if live sperm were found at 2 then we must assume that at some time there were live sperm at 3, but that the secretion either from the cervix or the uterus killed them. The finding of no sperm at 4 has been diagnosed in the previous classes.

**Treatment.**—Correct the condition responsible for the killing of the sperm.

#### Class F.

1. Vaginal outlet and vulva, few dead-straight tailed or none found.
2. Posterior cul de sac, few dead straight tailed sperm found or few live sperm found or combination of the two.
3. Cervical os, live sperm found or none found.
4. Cervical canal, live sperm found.

**Diagnosis.**—The findings at one and two have been diagnosed before.

The finding of live sperm at 3 has also been diagnosed.

Not finding any sperm at 3, but finding them at 4, means that either they were at 3 and have traveled into 4 or that they were drawn right up into 4 at the stage of relaxation and return to normal.

The finding of live sperm at 4 shows that the mechanical part of the act is normal; that the secretions are normal; that the cause of the sterility is higher up, either in the body of the uterus, the tubes or the ovaries.

For the proper diagnosis and treatment of the conditions in the uterus, tubes and ovaries that might be responsible for the sterility, the gynecologist is consulted.

#### Class G.

1. Vaginal outlet and vulva, few dead straight tailed sperm found, or none found.
2. Posterior cul de sac, few dead straight tailed sperm found, or few live sperm found, or a combination of the two found.
3. Cervical os, live sperm or none found.
4. Cervical canal, dead sperm found.

**Diagnosis.**—The findings at 1, 2 and 3 have already been diagnosed. The finding of dead sperm at 4 means that the mechanism of the act is all

right, but that there is present some condition in the cervix or higher up which is producing some change in the secretions, and that this change is killing the sperm. The finding of dead sperm at 4 might also be explained as follows: dead sperm were found at 2, that the mechanical part as played by the cervix was perfect, so perfect that it drew up the dead sperm and we found them at 4.

**Treatment.**—Consists in correcting the conditions responsible for the death of the spermatozoa.

Summarizing all the information that we have gained, from the history and physical examination of the case, from the chemical and microscopical examination of the genito-urinary secretions, from the examination of the semen (condom specimen) and from the examination for spermatozoa in situ, we can arrive at a positive diagnosis, as to who is responsible for the sterility.

267 Utica Avenue.

### PSYCHOLOGY IN MEDICAL JURISPRUDENCE.\*

EDWARD R. FINCH,

JUSTICE OF THE SUPREME COURT OF NEW YORK,  
New York.

All are accustomed when they turn back their minds to college days to pick out the subjects they have gotten more good out of later in life. The two subjects which it seems to me I have gotten the most good from are social science and psychology. Psychology makes the difference between the success and failure in almost any business. I knew of a poultryman who beat all his competitors simply because he was the first man to sell poultry in attractive packages. He distanced all by the fundamental fact that he understood psychology.

Now let us take another point that has a bearing on psychology and medical jurisprudence. We hear a great deal about social unrest; it is on the tongue of every body. It is a fact that the people do not recognize the psychological elements that produce it. Look at it this way. Heretofore, when capital appealed to labor it only appealed to one instinct, that was to the instinct of self-preservation. They said if the laborer received enough money to keep alive that was all he ought to get. They must recognize that there are other instincts besides the instinct of self-preservation that are fundamental. I am not going to say that every one of the other instincts is a necessity, but every one if recognized would make for co-operation. The first of these other instincts is the instinct of appreciation. Think of the work that people will do when it is properly appreciated. The capitalist who gets the best out of his workmen shows appreciation.

There is another instinct as fundamental; it is the instinct of self-expression—of expression in work. Also there is the home instinct—that is the instinct of love, and the instinct of being willing to sacrifice, and the instinct of heroism and the instinct of loyalty. Every one of these is an instinct that should be taken into consideration. The manufacturers who are successful are the manufacturers who are mindful of these other things. It will probably strike you as rather peculiar if I say it, but the manufacturer who is having trouble should call in a doctor, for

\*Read before the Society of Medical Jurisprudence, New York, Dec. 1, 1919.

there is something wrong with his mental attitude. Many workmen are receiving wages which are adequate and yet they are not satisfied. I have heard capitalists and employers say that they had no trouble because they took pains to say that they appreciated the work done, and the workmen knew that their work was appreciated. Another capitalist said we provide houses for our employees. We give them homes, but we do not make them sign a contract that if they fall down they lose their home and forfeit the money they have paid. Instead we allow the man to get back all he put in with the interest. I just say these things to show the points in psychology which are not always appreciated.

When you enter the realm of medical jurisprudence, where the subject matter deals more with mentality, psychology plays a much larger part. From the layman's standpoint I have always been unable to understand why mental healing and medical science should not go hand in hand to be more fruitful, namely, to cure the patient. We sometimes see these two branches growing side by side in hostility. If you can make a man ill by suggestion why can you not help him to get well by suggestion? Psychology and medicine are two sides which should go hand in hand when used by men of judgment. I ask if a man has the power of these two sides with good judgment would he not be a man who could accomplish more than if he used only one or the other?

To come to the medical expert witness. I mention him because the medical expert is so much more valuable as a witness if he does the work taking note of the psychological elements that enter into giving his testimony. For instance, I will give you a very practical illustration of what I mean by showing the advantage if the medical witness testifying on the stand will disregard technical medical terms. First I want to illustrate my point by telling you about a botanist whom I met last summer. He is spending his life in popularizing botany and condemns in the strongest language the men who surround that subject with such technical language. He said there were 20,000 tons of material that was waiting for him to translate into language which everybody could understand and profit by. He is employed as the head of a nature study department and he takes the nature study material and puts it into language the people can understand. Where a medical witness goes on the stand and takes the trouble to put what he has to say in plain Anglo-Saxon it stamps him as a witness who knows what he is talking about. Suppose you have a doctor go on the stand and talk about trauma and hematoma, the first thing the opposing lawyer asks on cross-examination is: "You spoke of trauma—trauma means a blow. You spoke of hematoma—A hematoma means a blood clot, is it not so?" The doctor says "Yes," and that takes away from the force and effect of what he has said. The lawyer has seized upon his weakness and the jury will take the same label and apply it to all he says. The witness who disregards technical terms is twice as forcible as the one who insists upon using them. The witness must state his proposition clearly and frankly. Many do not state the matter clearly and when asked questions on cross-examination do not answer frankly. If a man answers clearly and frankly and does not evade on cross-examination he produces the effect he desires on the jury and on the court. Every body

wants to do that, and when a physician does that everybody says he is a good medical witness. He not only presents his subject matter well but he has in mind the psychological elements which help him to present it more forcibly.

In this Society there are both doctors and lawyers, and I wish to turn aside a little from my subject, for what I wish to say applies to both in presenting any proposition. I have wondered why in making an argument particularly before the Court, or anywhere else, when a man wants to influence the human mind or a number of human minds, why he does not recognize the way in which the mind works that he is trying to influence. For instance, most lawyers when they get up to argue insist upon stating all the facts first. They are conscientious and do not want to leave out any of the facts, and so they state them at great length. The Court not knowing which facts to put emphasis upon and which not to emphasize, finds it difficult to follow the long statement of facts. If men would only recognize that the mind of the Court works along the points the man is trying to make, many an argument would be presented more effectively. The Court wants to know the points. If the points are stated first and then the important facts under each point that will tie up the facts to the points and the whole matter will be presented psychologically. Then the Court's mind is turned on these points the lawyer has made, he has the facts classified with them and will remember the points; for memory is the power of association of ideas and immediately things are associated they are remembered. The Court remembers the points and in that way can reproduce and repeat every argument the lawyer has made. We should recognize that this principle is valuable not only in presenting a matter to a judge but to any other man one wants to influence. It has been a great wonder to me why that method is not more often adopted. As it is, the Court is sometimes forced to drive the attorney to this method. The Court sometimes interrupts the attorney and forces him to present his argument in that way merely to get light. The Court says: "Do you mind telling me what points you have in mind?"

Now to come a little bit closer to the subject. Last year there was an amendment made to the statute law which only took a few words to express but it seems to me to mark a very distinct step. Under the statute law, as you know, mental defectives may be committed on the certificate of two doctors certifying that the person is mentally defective. The doctors give the reasons and many times set forth conclusions rather than facts. Legislators amended the laws so that instead of two doctors one doctor and one psychologist can certify. The statute defines what qualifications the psychologist must have. He must have studied psychology two years in the post-graduate department of a university. I will read the language to be exact about it. "And one psychologist who shall have had two full years post-graduate study at an incorporated university or college and three years actual clinical experience." I read this because I do not know what the actual clinical experience of the psychologist might be. But this is the definition of the statute. That shows an attempt on the part of the law to recognize the importance of psychology, because when you find anything embedded in the statute law there is this evidence that it has assumed an



importance that compels legislators to take cognizance of it. It used to be the old standard plot for fiction stories to have somebody declared insane because another wanted to put them out of the way, and when I see the ease with which that can be accomplished I do not wonder that that was the old plot. I do not know whether you realize that physicians and psychologists may certify, giving the facts, that a person to them is insane and they may make a certificate that no notice be given to the person because it may unduly excite the person, and if that certificate is presented to the Court the Court may commit. The Court says: "Here are two men who know about insanity and they have certified that this man is insane. We do not know so much about insanity and if these two men say this person is insane why should I say he or she is not insane. The two doctors may go further and say that no notice should be given to the person because it might do him harm. Do you see how drastic that power is and how much duty and responsibility it imposes on the medical fraternity? When such a certificate comes to me I silently pray that those two men may be men of the highest honor and conscience. There used to be the law concerning feeble-minded people, but now they are called mental defectives. We used to have a pathological institute but in 1910 it was changed to a Psychiatric Institute. Under this term mental defectives, I want to call attention to the great danger that is involved in connection with committing persons who are mental defectives.

In the first place these people are committed oftentimes by doctors using various so-called tests, and I do not use the term so-called tests in an opprobrious sense. They use various set tests, such as the Binet test, with which you are probably all familiar. The fundamental principle underlying this test is that we can judge people by a set test. You take a person and give him the Binet test and you say he is equal to a child of nine years, or eleven years or seven years as the case may be, whatever the Binet test gives. I do not believe that you can always determine with safety by any set test. I do not believe you as medical men can lay down hard and fast rules and by them say whether a person is a mental defective or not.

I want to tell you about a man who talked to me about the Binet test. He told me just what I have told you. He said the Binet test was a fine test. I said: "How about such and such a patient?" "Oh," he said, "that patient has been Bineted so often that she has become so familiar with the tests that she can say them backward or forward or any way." He still claimed that she was a mental defective and that her facility in passing the tests was merely a mental feat. Would you call a person who could perform such a feat a mental defective? I mention that only to show that each person ought to be judged by the facts in that particular case. Take a borderline case, a person who is able to sustain himself in society, but just above the borderline. If you call him a mental defective and put him in an institution every doctor here knows he will soon deteriorate; that is apt to be the result of institutional life. If we put these people just able to care for themselves into institutions they will constantly deteriorate and are apt to become public charges for the rest of their lives. If doctors do not exercise care but take persons who are near the borderline and put them into institutions they may cast many

self-supporting persons into the dependent class. That is one of the dangers you must be careful of, because I think I have shown how much depends upon the certificate the doctor and the psychologist make.

There is another great danger and that is the opportunity that is afforded, not based on merit, to carry out a policy for the public good which seems advisable to the person doing the committing. When we used the term mental defectives it is a large term and offers a large opportunity for abuse. I will not go further than that in a public address but there is that opportunity for abuse.

I think that it would very well be within the province of an association of this kind to see to it that the qualifications of physicians who are supposed to be qualified to make such certificates should be safeguarded. I do not charge that it has been abused either directly or indirectly, but particularly when we have changed the classification to such a broad classification as that of mental defective, we should be sure that the doctor making the certificate has good judgment and common sense. It is to such a society as this that I am sure that statement applies.

America has opened its heart to foreigners who come to our land and there have been some of those who have not been in their right minds. America has taken into its self all who came to its shores, and we have thought after we have taken them in that we have done our duty towards making them good citizens if we sang to them the Star Spangled Banner once a year. Lately people have come here not to take part in our Government but with hatred in their hearts for this Government and for everything connected with it. They have come frequently because they have found conditions too hard in the countries from which they have come, and they have a grudge against those countries. They have come to get out propaganda here to endeavor to embroil us and to strike back at their own countries. So far as these people are mental defectives the doctors will attend to them. But it seems that all associations, particularly associations that have the power of appeal to the elements of law and order, should ask themselves the question whether we should allow the freedom we have allowed to people who are using these shores deliberately to incite criminal anarchy. Is not the psychological effect of this propaganda to incite to criminal anarchy—this having the suggestion of criminal anarchy before our people all the time? Life is hard sometimes for all of us and if we dangle the hardness of life before the people and tell them that any hardness is due to something wrong and does not come in the ordinary course of life we are thereby inciting to unrest and perhaps worse. I know a professor, and a foreign one, who says the American people are becoming more and more emotional every year. As a people are we not becoming more emotional? I ask some of the older men to turn back and ask if they had a nine days' wonder all the time as we have it now. I think it is a fact that as a nation we are becoming more emotional. Is that because women are taking a larger participation in affairs? I just ask that for information for I really cannot say. But it is a fact that as a people we are more ready to respond to the suggestion of the day. As a people we do more reading and less thinking than formerly. The film people say that more and more the people who come



to see the films object to anything that partakes of education; they object to educational films and to travel films. They want something amusing, something morbid, something sexual, nothing educational. That shows that more and more we are letting other people do our thinking for us. We are going more and more by crowds than did the old sturdy stock of our forefathers; they did their own thinking.

What is the influence of the social unrest? It has been said that if one goes out into the country and sees the little homes he will see what will stop the onrush of criminal anarchy and organizations against government. It is the people out in the country who own their own homes, not the people in the cities who are going to stop it. Therefore the people in the cities are doing less and less thinking for themselves. They are doing less original thinking and more reading, and they let the reading do the thinking for them. The reason I mention the psychology of the crowd is because I want to show how, particularly in the cities, the person who makes it a business to incite to crime finds a ready response and a readier material with which to work. I do not think I can do better than just to read a sentence from the last public utterance of Theodore Roosevelt. "One flag, the American; one language, the Declaration of Independence; one loyalty, the loyalty to the American flag." I think it is well worth while calling attention at this time to that sentence.

Discussion.—Dr. Nathan B. Van Etten: Judge Finch's ideas concerning simple medical testimony and its psychological effect on the jury are well taken. I have seen many men going on the witness stand who forgot that they were merely on the stand to answer questions in accordance with their oath, to tell the truth and tell it simply in an intelligent manner for its effect on the jury. They seem to think they are there to exhibit their extensive pathological information on the particular pathological condition which is being presented. I recall a man who was a most remarkable expert witness. When he went on the stand he simply told the bare truth without volunteering information and he told it in a simple unaffected manner, and in such a way that he obtained the confidence of the jury. He became very much sought after as an expert witness because people felt that he would make an impression upon the jury. If a physician goes on the stand and employs simple language, he produces an effect upon the jury that he cannot produce with technical language that they do not understand.

As far as American emotionalism is concerned, what has been said is very largely true. We have such a wonderful amount of material served up in the newspapers and magazines and do such extensive reading that we are all rather compelled to be superficial and to accept a conclusion without thinking it out for ourselves, and I feel that a busy man has very little time to digest the articles he reads. He reads in the newspapers from the headlines the gossip of the world; he has no time to study reasons, and he becomes sentimental, emotional, superficial. There is little time for detailed thinking, and perhaps the farmers or those engaged in rural occupations, who are not jostled in the rush of the city do more thinking for themselves. We always have gotten our original thought from the country and from the sons of farmers who have come to New York. It has been said that if one attempted to start a society of well-known men who were original New Yorkers it would be a very small society.

Dr. Thomas C. Chalmers: I have been interested particularly in the suggestion that the profession of medicine should go hand in hand with mental healing. I believe the practice of medicine has gone hand in hand with mental healing since the profession first started, but I feel that some people who read this address may think that in a way Judge Finch is condoning a cult by his remarks on this question. We are now going through a change whereby because of superficiality it has become possible for cults or quacks to gain more or less of a following. They have made capital out of the discontented patients of the medical profession. This is true of other cults as well as of mental

healing, but I do not believe the people today, the great mass of the people today, have forgotten the work their physicians have tried to do for them. I believe medical ethics is no less respected today than it was by the men whose pictures you see on these walls. There are cases in which it is impossible for the physician to get results satisfactory to themselves or to the patient, and there are other cases in which step by step the physician is accomplishing the results he is aiming at, but in either case the patient may become dissatisfied and through the influence of some friend he falls into the hands of some mental healer. I believe, however, that on the whole the people value the service the medical profession has given them. I quite agree with the speaker that the people should do more thinking for themselves.

The practice of medicine has become progressively more difficult. It is harder today than it was when I graduated, and it was harder then than it was when my father began practicing medicine. But the medical profession has continued to work along the old lines and to sacrifice itself for the benefit of the patient. It is up to the patients to back up the profession and to steer clear of the "isms" of today.

Another point is that of the question of propaganda. We are undergoing a change of social conditions and we are going through a change of propaganda that is started largely by men who have made enormous amounts of money and have organized funds administered through managers who try to swing the mind of the public in the way they want it to swing. Some foundations do excellent work; others throw out dangerous thoughts and dangerous ideas to the people at large. We do not think enough because we have time to do nothing more than to read headlines and if an opinion is expressed by a paper whose policy we like we are apt to agree. I am glad to have heard Judge Finch, who has made so many good suggestions, and especially the suggestion that we should do more thinking for ourselves. I do not believe America is going to be influenced by the Bolshevik element. I think the old American people are going to stand back of the country as they have always done before.

We are more emotional for another reason, that is because the type of the people of America is changing, because of the mixture of foreign blood. But we are getting American foreign blood and we are not going to let it make Bolsheviks of us.

Mr. Koehl: In reference to what Judge Finch said about using technical medical terms on the witness stand, there may be instances where a man is unable to express what he has to say in other than technical terms. Many also fail to use understandable Anglo-Saxon, by that I mean language which is easily understood by the many rather than language which is plain and clear to the expert or the physician. This same criticism has been brought before this society before. We had an old man and an active one who used to criticize severely the language used by physicians in writing prescriptions so that an ordinary man could not understand them, but perhaps it is not always possible for an expert or a physician, trained along certain lines, to think and express himself, when he is talking on his particular subject, in language of ordinary use so as to make himself as clear as he otherwise would. It is perhaps a very difficult thing, but I do agree that it is desirable and would be beneficial. Perhaps if the matter of training physicians for general practice were modified and directed along these lines in the course of time a change might come about so that things now expressed in technical terms understood by only a few would be expressed in language understood by the many. That is very desirable.

As to the commitment of incompetents, the insane and mental defectives, I think that cannot be too carefully safeguarded because these people cannot protect themselves. Normal people are able to answer questions and to care for themselves, but in dealing with mentally defective people we are dealing with the weak and we should deal with them very carefully and conscientiously. In respect to the commitment of this class of individuals the statute could well be amended by requiring that three examiners in lunacy should certify instead of two, and probably one of these might be a layman, because oftentimes a layman is as capable of judging of a person's mental state as a physician. We know that in olden times mental trouble was not classed as a disease, but today it is coming more and more into the province of the physician. But as to the mental state of an individual I must take the stand a person of good judgment is as capable of deciding as any one else.

As to the propaganda side, I am about to criticize a feature of our American life which I think is injurious to the country, and that is the daily press. The daily press

is as much responsible for the emotionalism as anything else. In the morning the papers say one thing and in the evening they say just the opposite. The press today is more of an advertising medium than a conveyor of particular information. There are pages and pages of nothing but advertisements, and as you go through the paper it is not something to produce quiet of mind, but rather to excite the mind, and if one reads much it does not tend to connected thinking. There is in the paper a scrap of this and a scrap of that, a little of this and a little of that, and one does not know what to think. But perhaps there is an excuse for the daily papers, because a daily paper is thrown together hurriedly. This comes in and that comes in and has to be forced through so one must make allowances, but if all were more careful in their general reading of newspapers to look at things more critically we would sober down considerably. I am speaking about the newspapers with some knowledge because as a boy I was brought up with the press and know the trade through and through. I know the newspaper life and the making of a newspaper through and through. It is largely, as I see it, the papers of today that are cast out broadcast and read by unthinking people that have been instrumental in moulding opinion.

Oscar W. Ehrhorn, Esq.: It may be interesting in regard to the commitment of insane people and the need of extra safeguards to call attention to the fact that the law requires that duplicate reports be filed, the one with the Commission in Lunacy and the other in the County Clerk's Office, and that notice be given, so that one may learn about a commitment even when the doctor's certificate shows that notice should not be given because it might be detrimental to the person committed. There is another safeguard which places responsibility upon the heads of institutions not to receive such persons unless in their judgment the individual is irresponsible and should be committed. It is possible that examiners have not given due notice. Nevertheless, it is rather hard to have a person committed who is not insane or incompetent because the head of the institution would not receive him unless in his opinion he was insane, or if having received such a person by mistake, he would return him upon finding that he was not insane. I believe in the honor of the average man of the medical profession, and that if an initial mistake were made it would speedily be corrected by the head of the institution to whom the alleged insane person was sent.

I may say in regard to testifying in plain language that the medical schools generally give a course in medical jurisprudence which sets forth the importance of that fact. I am informed on this point because I have occupied the chair of medical-jurisprudence in a medical college and the advantage of testifying in simple language was considered and recommended. That, however, does not mean that attention should not be called to the subject later on, for unless one has learned the importance of testifying in simple language in the stern school of experience, it may be necessary to reiterate the lessons taught in the medical school. Judge Finch sees this need every day and I have myself seen physicians on the stand who did not appreciate this fact.

Dr. Hoag: I would like to speak from the standpoint of mental healing. I am inclined to think that the old saying, "A man by the time he is forty is either a fool or a physician," may be paraphrased—that every doctor by the time he is forty is either a fool or a psychologist. By that I mean that every doctor is using psychology in his daily practice when through his personality and his knowledge of psychology he influences his patient. We have no fight with mental healing, but with the schools of mental healing that masquerade as a panacea for all ills. These are employing an old trick.

I am reminded of a story of an old priest who had a shrine and was very successful in getting alms for healing people who came to him. He was so successful that at length as he grew old he took a young priest as an assistant. After a time he suggested to the young man that he start out and see what he could do for himself. The young man said he had no money and not much confidence in himself. The priest offered the young man a donkey and told him to start out. The young man took the gauntlet and set out with the donkey. He did not meet with much success and began to feel quite discouraged, when to add to his troubles the donkey died. He did not know just what to do, but it finally occurred to him to bury the bones of the donkey and over them to erect a shrine, upon which he inscribed the legend, "Here lie the bones of the Sinless One." He soon became very prosperous and rich and after a time decided to go back and tell the old priest of his success. He journeyed back to the old priest and told how he was

situated not so many miles away. After telling of his success he finally said, "There is one thing more I feel I must confess to you, and that is that under my shrine are buried the bones of the donkey you gave me." The old priest said, "Hold, not so fast, I'll tell you something. Under this shrine lie the bones of your donkey's mother."

Dr. Edward E. Hicks: As to two doctors and a layman to examine an alleged insane person, I have sat on a number of commissions with lay members and I have failed to see that the laymen were of much use. If I were to make a criticism of the insanity law it would be in respect to the qualifications of physicians appointed as examiners in lunacy. A physician is required to have only two or three years' practice in order to become an examiner in lunacy. It is not necessary that he should ever have seen an insane person and he is required to practice medicine only two years. Two such persons can put an alleged insane person away, that is, unless there should be a judge such as we have in Brooklyn who turns them all loose. If I were going to correct the insanity law I would insist that the men qualified as examiners in lunacy must have some special training for that purpose. It is a mighty bad thing when two doctors who know nothing about insanity and have never seen a case of insanity and know only what they got in college can put a person away. Now, taking two such men and adding a layman makes it worse rather than better.

Mr. Rosenberg: There are two points in connection with this subject of mental incompetency. The first has to do with environmental factors, and that I will pass by. The other is the problem of the practical solution of the question of mental incompetency. In connection with the latter there are two very serious things to which I wish to call attention. I wish to ask if it is right that mental incompetents should be classified into two groups. The one group those not having any knowledge at all, and the other the mental defectives, those who have not developed, the Morons, according to the French, who develop no further than a child of ten or twelve years. Now that is not Nature's plan. Nature does not make people by machine, and the question is where should this line for differentiating mental defectives be drawn. When is it safe to say that an individual because he differs from the average should be incarcerated?

Again it is said that the heads of institutions will not receive persons whom they do not believe to be insane or mentally incompetent. While I appreciate that doctors and heads of institutions as a rule try to act with justice, there must be some institutions that have unscrupulous men at their heads. I think there should be more safeguards than there are thrown about those who are alleged to be mentally incompetent. What can we do to prevent the incarceration of those alleged to be mentally incompetent, and what for those who regain a normal mentality under treatment? These should not be left to their friends or those in charge of institutions. I do not know whether there is a periodical inspection of institutions, but I think there should be such inspection. Every institution where there are those alleged to be *non compos mentis* should be visited, say once in six months or a year, so that if there is any person kept incarcerated when he should be free that fact may be ascertained.

Dr. Hicks: There are at present 38,000 inmates in the State institutions and they are greatly overcrowded, and are short of physicians as well as of attendants. Physicians who would do the inspecting that the last speaker has suggested ought to be experts, and I do not know how many experts it would take to visit those 38,000 inmates. If such an inspection were made once a year an incarcerated person might have to wait eleven months before the inspector would see him. In the State institution there is a physician who is superintendent, and assistants. The inmates are divided into wards and groups and are examined very frequently. The fact is they have every care and safeguard, and the authorities do not want to keep them any longer than is necessary because of the overcrowding. Many patients are paroled to keep the numbers down. There are now in the State institutions 10,000 in excess of normal accommodations. The patients committed to State institutions are as safe or safer than those in private institutions. In State institutions there can be no ulterior motives for keeping the patient longer than is absolutely necessary. In private institutions they may be honest, but at the same time there are business considerations. Since I have an intimate knowledge of the State institutions I can say that they are the best place to put an insane or incompetent person. I know whereof I am speaking, for my wife is a manager and visits institutions without com-



pensation; she inspects the food, clothing, and care of the patients, and she tells me she has failed to find an institution that is not well conducted and where the physicians are not conscientious in the performance of their duties.

A Speaker: May I be permitted to ask a question which Judge Finch may consider and answer afterwards. I would like to know whether I am incompetent or not, and I would rather have the opinion of a layman or a judge than of the doctors. Following his suggestion that we do not do original thinking I would like to know whether there is something wrong with my psychology. He suggests that what is wrong with some capitalists is that they do not show appreciation toward labor. I would like to call attention to an experience in reference to a multi-millionaire who is employing twenty or twenty-five thousand workmen. He gave individually about a million dollars and his corporation gave about \$750,000 for the benefit of the workmen. During the last three months that same man took \$150,000 commissions from the firm that he was not entitled to that had been given to the workmen. Was there something wrong with that man's psychology other than the mere greed for money?

Another experience with an employer was as follows: He was employing some 200 men, some foreigners and some Americans. They went out on a strike and they obtained all they asked for in the way of shorter hours and increased wages and better working conditions. In addition he offered them health insurance, whereupon the men went out on a strike again until they could be convinced that the health insurance was for their benefit. I want to know what was wrong with the psychology of that millionaire, what was wrong with the psychology of labor and what is wrong with my psychology.

Mr. Rosenberg: I would like to know how many of the people in the New York State Hospitals for the insane are foreigners?

Dr. Hicks: There are about 38,999 inmates in the State institutions for the insane and of these about 80 per cent. are foreigners.

Mr. Rosenberg: I have been permitted to make examinations in the asylums and, though they were somewhat superficial, I felt that there were people in these institutions who did not belong here. The American people are a strong sturdy people and it seemed to me that many of these inmates were foreigners. By the appointment of a commission composed of a doctor, a lawyer and a layman who should have unlimited power to examine these foreigners they might be prevented from becoming a burden upon this country.

Mr. Ehrhorn: Mr. Rosenberg is correct. Many of these people are mental defectives before they come to our shores. In fact, it is quite the thing on the other side when a person is mentally incompetent or shows signs of becoming so and of being a burden to his family to ship him to the "Land of the free and the home of the brave." The law has been that if we do not discover the defective mental condition of such persons within five years our power of return is lost. If necessary, perhaps the law could be changed, increasing the period during which such persons can be returned whence they came.

Dr. Lazarus W. Zwisohn: As an American foreign born who has practiced medicine in this country for thirty years I feel that I am in a position to speak. There is a reason why the germ planted by Bolsheviks grows. It is that we have in our institutions free speech and a free press, and the foreigner takes this as a license to preach anarchy. But it is not the foreigner himself who does this. He as a rule does not read English. It is his children who read the trashy newspapers and some of the books in our libraries. When he begins to preach anarchy it is because someone has told him it would be better than things as they are. Another thing is that the law states that a man must be able to read and write, and it is those who preach anarchy. It is the intelligent people who are the Bolsheviks. There should be a law that anyone preaching or writing anarchistic propaganda should be considered a criminal. That is the only way to stop the spread of Bolshevism in this country. It is the foreign-born boy brought up here who is the anarchist, and it is some of the papers that are published here that lead him into it. I think we should do all we can against such papers.

Mr. Solomon: As has been pointed out here tonight, there is an element, an injurious element, to be found among the foreign element; it has also been found that the greater per cent. of the inmates of our institutions are foreigners, and, as has been brought out here tonight, that those who are responsible for the propaganda that is stirring up so much social unrest are also largely foreigners. I believe that

present conditions are due to the fact that we have not been able to properly sift them out because we have not included the psychological element in the sifting process. I believe we will only begin to make this possible by introducing the psychological element in the very beginning of our teaching in the elementary schools and teaching the fundamentals that lie at the foundations of this country. I would like to ask Judge Finch if psychology makes for Americanism if we should not disseminate the knowledge that in dealing with the problems that confront America the influences that make for Americanism lie in psychology.

Dr. Frank W. Robertson: I have had some experience with the criminal and the insane and I am positive there is a large psychology attached to both. When the lawyers will take some pains to understand the criminal at the bar he will get more nearly at the root of the reason of committing crime and that will bring about a better treatment of the criminal than we have had. Some years ago in a paper read before the American Psychological Association at Washington it was urged that all criminals should be examined by a psychologist, with the idea that a large number of those convicted of crime are in a class which is abnormal though perhaps not insane, and that is being more and more recognized. Today we are studying the criminal from the psychological point of view at Sing Sing. They were studied for a time at Bedford, but that has been stopped temporarily. It will be begun again and they will be studied psychologically and otherwise. Some twenty years ago the inmates of the Elmira Reformatory were studied and the statement was made that 70 per cent. of them were mentally defective, insane or suffering from brain disease. There have been other investigations much more thorough that confirm this point of view, perhaps not to the extent of 70 per cent., but sufficiently to justify us in believing that we are on the right track and that as a result of these conditions these individuals commit crime and they should be sent to an institution for the insane rather than kept in prison. When this study was made 100 men were carefully studied. They were the kind usually sent to Matteawan. Dannemora was not established at that time. After making the investigation we were written up as having driven 100 men insane. All this goes to show that the psychological element is a very powerful factor as affecting those who may commit crime and come under what may be termed medical jurisprudence.

One word about state inspection. A state inspector who has no other duties visits all the private institutions as well as the State institutions and any patient can see him alone. I wish also to emphasize the statement that the State institutions are full and overcrowded and that they discharge patients who are in reality not sufficiently well to be discharged (though I do not say this in criticism), and are thereby more liable to relapse. Manhattan Hospital has accommodations for 4,500 patients, and they now have 5,600 patients, so that they are much overcrowded, and this institution is not much more overcrowded than the others, some thirteen in number. They are all overcrowded.

In reference to the foreign-born who come here and become insane, it is not possible to detect them when they go through Ellis Island. The inspectors are few and thousands of immigrants pass through. It may take three hours for six days a week and even longer to determine whether or not a person is insane. Indeed I have seen people in the psychiatric wards at Bellevue where we could not find out after observing them for thirty days whether or not they were insane. At the end of that time there would still be a difference of opinion among the doctors. When such is the case how can you expect that the public health officer is going to recognize insanity at sight. The trouble is we do not have enough physicians skilled in the recognition of mental disorders.

With reference to the foreign-born who have come to our shores, we must remember that they are subjected to a great deal of strain here. They are coming to a new country, are starting in at the bottom of the ladder and are susceptible to psychological strain and worry, they are therefore likely to break down quicker than Americans who are acclimated. Then, too many of them have unstable temperaments.

Judge Finch, in closing: I agree entirely with Dr. Hoag that every physician at forty is either a fool or a psychologist; that is the point I wanted to make. In using the word mental healing it has been taken in a way I did not intend. I did not designate a cult, but merely wished to make the point that every successful physician must consider the psychological element. This is such a large subject that all I can do is to make it suggestive from a number of points of view. That is all I intended to do.



Dr. Hicks is correct in his statement that we should require better qualifications in our examiners in lunacy. An examiner who has had only two years in the practice of medicine can scarcely be considered as having had sufficient experience. Then if we add mental defectiveness to lunacy it makes examination still more difficult for the examiner. Since adding mental defectiveness to lunacy makes the field so much wider, we must make the conditions so that when the certificate is made out it shall be made by the authority of a person who is well qualified. The details of the qualifications I have left because I feel that that is a medical subject, but my purpose was to leave it with you so that you can make the qualifications for examiners in lunacy such that the judges can feel that the examiners in lunacy are thoroughly qualified.

In speaking of anarchy, I was very careful in the remarks I made to say only criminal anarchy, as I was dealing only with the criminal anarchist who is the incitor to criminal anarchy. I did not once name any kind of socialism because under the term socialism there is a place for difference of opinion among patriotic Americans. I want the best thing for the greatest number and I did not even suggest socialism because I did not want to deal with a subject fairly debatable, but I did want to call attention to the fact that for the first time in our national existence people have come to us with hate to destroy organized government, and if any one does not agree with them they have a bomb for him and they aim to the destruction of everything we hold dear, our family life and established social customs. When foreigners think of Trotsky earning \$15 a week in the Bronx getting so much fame and money it is too much for them and they seek to gain a better livelihood and fame and to do the same thing that Trotsky did. I have limited my remarks to criminal anarchists who are attempting to overthrow our government and all social order.

I do not like to run away from anything, so about the man who helped the employees and then stole the \$150,000. I would feel very much as the workmen did. I would feel that with a man in a position of trust who stole that money the company would sooner or later become bankrupt anyway.

I would like to say two constructive things. In the first place I wish we could do something in our educational institutions, and by that I mean our public schools, toward building the character of the pupils. I do not say it is so, but I would like to ask the question whether we have been educating the wits of our young people at the expense of their consciences. Have we failed to build up character commensurate with the building up of mentality? I am told by thoughtful men that boys have lost the character that boys used to have. They have been educated in the public schools and their wits sharpened, but they have no rudder of conscience to guide them. If that is true should we not teach by precept and example the simplest kind of ethics; that is, the duties of simple morality—of loyalty and of speaking the truth? Would that not make for better Americanism? I realize the danger of bringing any religion into the public schools, and when I speak of teaching ethics it is in a form with which every form of religion can agree.

In connection with immigration, what is the matter with this suggestion, and I put it in this form because I realize that greater progress is made if there is no setback through mistakes. There may be some objections that I have not thought of. It was well said by the doctor who evidently has had experience, that it is impossible for the authorities at Ellis Island to tell whether an immigrant is insane or not. They only have a short time in which to make the examination and, as you have heard, it sometimes takes a week or longer, even months, to tell whether or not a person is insane. I do not see why this plan would not work? I see the Senior Senator from the State of New York, Senator Calder, has made the suggestion that a man have a character certificate from his home town. The kind of a character certificate I like is a man's works. Let me find out what a man has done and I can tell you whether he is fitted for naturalization. I do not care for extended knowledge in geography or civics, but I like to know where the applicant has worked for the past five years, why he left, and what he did. When a man comes to our shores he might be asked for a definite period, whatever you choose to make it, one, or two or five years, to make a report to a Government officer as to what he has been doing during that time. If he does not give a report and is found in an insane asylum you can tell that he was pretty surely insane when he came over here. If he was not employed at all for three years then I should say he was not fit to become a citizen. Working in that way would require a certain

number of clerks, but would it not be worth while if you could obtain adequate proof as to what kind of citizens you were getting? I make that suggestion realizing the importance of your Society. Perhaps I have not had experience enough to warrant my making such a suggestion. It may perhaps be good. If it is good see what you can do to carry it out. If it is not good put a hole in it and throw it out. My suggestion is to let men prove by their works what they are and whether they are desirable citizens.

### A REMARKABLE CASE OF GUNSHOT WOUND OF THE CHEST.

HOWARD LILIENTHAL, M.D., F.A.C.S.,

FORMERLY LIEUT. COLONEL, MEDICAL CORPS, U. S. ARMY,

New York.

The following case has been referred to in a report on thoracic surgery at Evancuation Hospital No. 8, printed in *The Journal of the American Medical Association*, March 22, 1919. The circumstances are, however, worth preserving in a more individual form.

It had been a strenuous day for me in the operating room, numerous severe thoracic injuries having been brought in from the fight in the Argonne. I had put in a full eleven hours of work. There was one hour's intermission out of the twelve hour day for cleaning up the eighteen table operating room so that I had had time for a bite of lunch and a few breaths of the rainy October weather of northern France and a short splash through the mud by way of exercise. "In the first sweet sleep of night," or, to be more exact, at about 1 A. M., an orderly roused me from the cot in my chilly tent with the announcement that Major Hennington thought I would be interested in a patient who was on the table prepared for whatever might happen to him. I knew that Major Hennington, an experienced surgeon, must have thought it well worth while or I should have been tempted to forego the pleasure of the ordinary merely "interesting" case at a busy evacuation hospital where nearly all the cases were absorbingly important.

Having retired the evening before without disrobing I was ready in a few seconds for the quarter of a mile tramp through the slippery mud in the Stygian darkness, a welcome cloak against the prying eyes of the Boche airmen. Through the covered way arranged so that no gleam of light should show when the door at its end was opened, I passed into the operating room with its glare of bright electric lights where most of our tables were occupied and six night teams were busily working.

I found the patient in fair general condition following a thoracic wound by a piece of high explosive shell. He had been struck in the right arm, paralyzing the distribution of the musculo-spiral nerve. The missile then had passed into the thorax through the fifth interspace in the mid-axillary line. So far there was nothing extraordinary but when Major Hennington showed me a little projection in the left fifth interspace in the axillary line and stated that our efficient x-ray department had found no other foreign body excepting the one here presenting, I could scarcely believe my senses. Had the missile passed entirely through from the right side of the chest to the left side at this level, the patient long since should have been beyond the reach of surgery. Knowing my great interest in this class of war wounds, Major Hennington most kindly insisted that I take the case.

The physical signs of right hemothorax were present but the left chest appeared clear. A short inci-

sion under local anesthesia through the skin disclosed a piece of steel almost square in section and about one-quarter of an inch in diameter. I grasped it with forceps and slowly and carefully withdrew a square rough prism of steel two inches long.\* The withdrawal was not followed by hemorrhage and the tissue planes slid over each other, making an airtight closure. The wounds of the arm and the entrance wound in the chest were next treated by debridement and the right chest emptied of blood by trocar and canula.

The next day it was hard to believe that this patient, absolutely without shock, had received so serious an injury. Eight days later he was evacuated, apparently convalescent.

It was obvious that the left chest must have escaped grave traumatism and all sorts of theories were discussed to explain what looked like a miracle. The total absence of ecchymosis at the time of operation and later made it most improbable that the missile could have traveled round the circumference of the chest. The only tenable theory was one advanced by Captain W. A. Kellogg, of New York, a member of my operating team, who suggested that the éclat had probably passed through the right chest obliquely forward striking the sternum and that it had been deflected by that bone without lacerating a vessel large enough to bleed and without injury to the left lung. It must have pierced the mediastinal structures cleanly and "end on." The velocity of the fragment had been reduced following its impact with the sternum so that it followed the curve of the ribs as far as the point most distant from the exploding shell, and here it would have continued on around the concavity of the posterior chest wall had not its momentum caused the jagged end to pierce the intercostal structures at this farthest point. Had the projectile been smooth and round it might have continued to follow the curve of the ribs until its momentum had been exhausted as a roulette ball follows the hollow of the wheel.

The leaden balls of the old slow velocity pistols have been known to follow the curve of a rib for a long distance without ever entering the thorax.

52 East 82nd street.

### THE INFLUENCE OF MIND AS A FACTOR IN THE PRACTICE OF MEDICINE.

W. F. McNUTT, SR. M.D., M. R. C. S., Edin.,  
San Francisco, Cal.

We all know how crude was the ancient practice of medicines and how absurd were the remedies employed. Of course, the ancients knew nothing of anatomy, physiology, pathology or therapeutics or the chemistry of digestion or the circulation. Science has thoroughly revolutionized our knowledge. Every student in medicine is now obliged to have a preliminary education sufficient to enable him to understand the instruction he is about to receive. Every recent graduate is a biologist, physicist, a chemist, an anatomist, a physiologist, a pathologist, a bacteriologist, a diagnostician, etc.; in short, he has a thorough knowledge of the science of medicine. But alas he has had no instruction in psycho-physiology, psycho-pathology or psycho-therapy. This is the gap—the weak point; not only in our, but in medical education in every other country.

\*The dimensions of this foreign body are incorrectly given in the published report above referred to. I have just verified the correct dimensions by measuring the missile itself.

Hippocrates about 2,500 years ago taught his students in his medical lectures at the Island of Cos that the influence of mind was a mighty factor in the practice of medicine. Just why our modern medical teachers ignore this extensive and important branch of practice is one of the modern mysteries. That they do is a fact; consequently, this branch of practice is left to faith healers, mind cures, Christian scientists, naturpaths and other charlatans, and regular practitioners will continue to leave the quack a free field in this branch, until our medical colleges establish a chair of psycho-psychology, pathology and therapy. Perhaps medical teachers think that the subject is not of sufficient importance to call for a place in the circular or annular announcement. Perhaps it may be thought that the influence of mind as a factor in the practice of medicine has no scientific foundation. We have only to remember that the practice of medicine is not a science.

The teachers in our medical schools are men of ability and experience. The facilities in our laboratories and hospitals are equal to those of any other country. It is no longer necessary, as it was years ago, for our medical men to go abroad to gain instruction in branches of medicine that our medical colleges did not teach. The foreign graduate no longer possesses educational advantages over a graduate of our own schools. Our own medical school instructors realize their responsibility to the public in sending out graduates to pursue the most complicated, the most difficult and most responsible of all callings. The young medical man soon learns that the body he is to repair and keep in repair is the most complicated of all machines; that it is presided over, as it were, by the conscious and unconscious mind.

What is mind? Are consciousness and mind synonymous? How does the brain that is at least 85 per cent. water manage to act as business agent of the mind? These are interesting, important and speculative questions, but need not concern the practitioner of medicine. His duty and self-interest is to acquire as best he may the knowledge of the influence of the mind as a factor in the practice of medicine.

When a physician, well educated and learned in the science of medicine, fails as a practitioner, who is the fault? In most cases because he did not acquire by experience what his medical college failed to teach him, viz., the influence of the mind as a factor in the practice of medicine. He evidently expected with his thorough knowledge of the science of medicine, and with the various scientific paraphernalia which he had been taught the skillful use of, that he could diagnose and successfully treat all who applied to him. He thought the practice of medicine is a science, which it is not; hence his failure. Shakespeare well understood the influence of the mind on the body. He says:

"The labor we delight in physics pain." "She never told her love, but let concealment, like a worm in the bud, feed on her damask cheek. She pined in thought." "I have some wounds upon me and they smart to hear themselves remembered."

Let me give an illustration of the influence of the body on the mind. As was the custom at the time, I commenced the study of medicine with a preceptor. My preceptor was a Methodist. The pupil in his church was vacant. He and a Mr. Crowe were appointed to hear the preaching and to interview a minister in a neighboring town with a view of call-



ing him to their church. Mr. Crowe came to the doctor's office Saturday evening to ascertain if the doctor could go in the morning. The physician regretted that he could not go, but asked Mr. Crowe to learn if the clergyman was a dyspeptic, saying that "if he has dyspepsia we don't want him; he will give us too much hell in his sermons." The doctor had learned by experience the influence of the physical on the mental condition.

To illustrate the influence of the mind on the body, about four years ago a patient came to me, saying he had been ailing for 18 months—appetite and sleep much disturbed—lost 20 lbs. in weight, and feared he might soon be obliged to close out his business. His family physician, a very intelligent man, had treated him for six months. Then he consulted a stomach specialist, and had the usual test—breakfasts, etc. After several months' treatment he put himself in the care of a nerve specialist. Getting no better the man decided to see a Christian Scientist. He was dissuaded and was brought to the writer with reports of Wassermans, blood count, urine by examinations and many prescriptions. I did not examine him or his reports. His pose, appearance and voice told me his trouble was mental worry. I looked straight at him and said: "You know exactly what is the trouble." "I do not." "Tell me and perhaps I can help you." He hesitated a moment and said: "I tell you, doctor, a nagging wife is hell." I asked who his neighbors were and he said: "A damn Suffragette, who is always stuffing my wife's mind with her foolery, and a brother, who is always hanging round."

Here then is the psycho-pathology of the case—the nagging wife—the Suffragette and her brother. I suggested that the patient tell the wife that many people are always ailing in one part of the city and enjoy excellent health in another part, and that he must move at once. He suggested a suburb, and in less than a week had moved. In eight weeks the fresh air and the ride to and from his business with pleasant friends had made a new man of him. Psychotherapy made the conscious mind right in eight weeks, thus overcoming the mischief that the unconscious mind had wrought in the eight months.

May we all live to see in the curriculum of every medical college circular the announcement of a chair of psycho-physiology, psycho-pathology and psychotherapy. Then and only then will this extension and important branch of medical practice cease to be left to Christian Scientists, mind healers and the other charlatans who infest every community to prey upon the incredulous.

#### **Costly Segregation Versus Expenseless Speech Correction, for Speech Defectives.**

At the Grade Section of the National Society for the Study and Correction of Speech Disorder, Walter B. Swift, A.B., S.B., M.D., of Boston, read a paper about Expenseless Speech Correction in the Public Schools. He showed conclusively how the expense can be taken out of it rather than making it more expensive as is being politically done in some quarters. He spoke in part as follows:

"A few cities are making the great and expensive mistake of putting all their speech cases in one school. The movement, however, which is in a majority all over the country is not tending to make speech correction more expensive, but to make it less expensive; for example, New York State has 201 speech teachers now installed without increased expense. The expenseless speech teacher is a modern method of attacking the problem, costly segregation is decidedly old-fashioned. In Cleveland alone there were 76 expenseless speech teachers installed last fall. Many other cities are following the example of Cleveland."

#### **ODDS AND ENDS IN TONSIL SURGERY.**

MAX LUBMAN, M.D.,  
New York.

The greatest fear of the surgeon in a tonsil operation is hemorrhage. The fear is not so much of the hemorrhage directly, as it is of the control of the hemorrhage in its inconvenient location. If the patient happens to be under local anesthesia and a hemorrhage occurs, the patient becomes nervous and excited. He cannot be controlled nor be made to sit quietly with his mouth open, but keeps on expectorating as soon as the mouth fills up with blood. His nervousness is increased by noticing the anxiety of the surgeon who loses his previous gentle tone, who becomes excited and irritable and busy giving orders. The excitability of the patient acts as a vaso dilator, thereby increasing the bleeding promoting expectoration, and so the vicious circle continues. If the patient is under a general anesthetic, the hemorrhage is easier to control but the danger of inhalation pneumonia should be thought of.

Various means are therefore instituted to minimize that danger. Some surgeons follow a routine practice by giving calcium lactate or chlorid for a week previous to the operation. Some surgeons give ki to adult patients for some time before the operation. Some surgeons inject pituitrin before the operation. Dr. S. Oppenheimer advocates of testing the coagulability of the patient's blood, if the coagulability period is longer than normal the patient is kept under observation until a normal coagulation time is attained. The danger of hemorrhage is therefore given careful consideration, while minor points here and there in the operation which appear to be quite insignificant and are therefore not observed, are to my mind of great importance not only to prevent hemorrhage but to prevent those mysterious deaths that occur shortly after an apparently successful operation. I will trace through, therefore, the operation and indicate those few points.

#### **Time to Operate.**

The best and safest time to operate is in the morning, as we are quite certain that the stomach is empty. The anesthesia is readily taken, much less ether is consumed. It also minimizes the danger of pulmonary complication that may be caused by inhaling vomited matter. It relieves the anxiety of the patient as well as the family who are impatiently waiting for the operation. If the patient is brought to the hospital and is under the care of a nurse that no food is given, the surgeon may choose the time to suit his convenience. But as we are quite often requested to operate in the patient's home, the morning hour is the best, for it is quite difficult to enforce the rule that no food should be given to the child up to the afternoon hour. The benefit of having an empty stomach for an operation and especially for the throat is very well known to all and no special emphasis is necessary.

#### **Anesthesia.**

It is best to begin with ethyl chlorid and followed by ether. The drop method is preferable, as by this method only can the amount of ether be regulated, and the anesthesia perfectly controlled. In regards anesthesia with ethyl chlorid I wish to remark that I have observed in a goodly number of cases that those patients, especially children, that come to the operating table without a struggle, and take the anesthesia without a fight, the ethyl chlorid should



be administered with great care, as these are the type of patients that stop breathing in the first few whiffs of the anesthetic. This phenomenon I cannot explain. I like therefore a fighting patient.

#### Degree of Anesthesia.

You will hear quite often the remark from the surgeon to the anesthetist "completely under" or "deep surgical anesthesia." I beg to differ with these gentlemen for the following reasons. The operation of a tonsillectomy may take from five to fifteen minutes. Why then deep anesthesia? Why surgical anesthesia to abolish the throat reflexes for hours when the time necessary for the operation are minutes? Are not the reflexes of benefit after the operation to prevent asphyxia? Are not the reflexes beneficial after the operation to prevent inhalation pneumonia? I personally ask the anesthetist to put the patient under just enough to carry me over the operation period, and I am delighted to have the patient out of the anesthetic as soon as I am through with the operation.

#### Modus Operandi.

Some surgeons after separating the tonsil from the pillars apply the snare, tighten it, and proceed with their work upon the other tonsil, then both tonsils are clipped off at the same time. All is well that ends well. But should there happen to be an anomaly in the tonsillar blood supply, or should the patient happen to be a bleeder it would complicate matters quite seriously. Is it not much safer to remove one tonsil and then the other? For as soon as one tonsil is enucleated we can get a fair idea if we are faced with any danger. We would notice the amount of blood lost, we would also notice the coagulation time, and when everything is satisfactory with the first tonsil then to proceed with the enucleation of the second tonsil. I know a surgeon who does not remove both tonsils in an adult at the same sitting but at an interval of a week or so. Although it is very conservative, still it is sound judgment and a very safe procedure.

#### Suction Apparatus.

The operation is much more simplified with the suction apparatus. The only objection I have is that it is used indiscriminately. It is of great assistance to clear the throat of mucus especially in children who suffer from bronchial affections. It is also of good service to clean the operating field during the separation of the tonsil from the pillars, but it does absolute harm if used after the tonsil is enucleated. It promotes bleeding by preventing the natural contractability of the blood vessels as well as prolonging the coagulation period which are the natural hemostat.

#### Adenoids.

Do not attempt to remove the adenoids unless all bleeding from the tonsillar fossæ stopped, otherwise the adenoid bleeding will overshadow the tonsillar bleeding. After the adenoids are removed inspect the throat for any loose shreds as they may be the source of bleeding later on.

#### Position of Patient.

As soon as the operation is completed the child should be turned over face downwards, and wet towels wrung out of ice water applied to the face and neck. It helps to stop bleeding reflexly and

hastens the awakening of the child. The child should be kept in this position until it is completely out of the anesthetic. The reasons are obvious. Should there be any bleeding it will flow through the mouth by its own gravity and to the most dependent position. It will also prevent from filling up the stomach with blood which would be swallowed should the child be in another position. Vomiting is thereby avoided. The most important is that it will prevent asphyxia and death, especially when deep anesthesia was used. The mysterious deaths that occur shortly after the operation are not due to loss of blood. To die directly from loss of blood must take some time. How much blood is lost in a perforated gastric ulcer? In a pulmonary hemorrhage? In an abortion? In a placenta previa? In an ectopic? If death should occur in those cases mentioned it may not be due to loss of blood directly. On the other hand, if the loss of blood should be the cause a goodly number of hours elapses before the final end comes. Apropos that subject, it is worth while to mention the ill fate that befell Seneca. As you know, it was reported to the emperor that Seneca was a privy to a conspiracy against him. A messenger was sent to take his life. The vein of the arm was opened that he might bleed to death. Later on the veins of his legs were also opened to accelerate his end. He lingered, however for hours. Death still refusing to come he drank hemlock and upon this also proving insufficient he entered a warm bath. Death still did not come. He was taken to a vapor stove where he was quietly suffocated. That may give us an idea of the time required to die directly from loss of blood. Therefore those cases that die shortly after the operation, the cause of death cannot be attributed to loss of blood. What is then the cause of death? Asphyxia, which is caused either by inhaled blood or mucus or the tongue drops down and obstructs the respiratory path. The predisposing factors are the following: The anesthesia was too deep to begin with, the throat reflexes are therefore abolished for quite a long time after the operation. As the operation is completed the patient is hurriedly dismissed from the table and is transferred to the care of a nurse. The patient is put to bed on his back. Any bleeding that might occur, or any mucus in the throat must naturally be inhaled while breathing, for the patient is still too deeply under to be able to swallow, or the tongue may drop backwards and downwards blocking up the respiratory path, causing death by asphyxia. The patient should therefore be kept on the operating table for a good while, the throat should be inspected for any bleeding before sending the patient to bed. Special instruction should be given to put the child on a flat bed with the face downward and keep the patient in this position until he is completely out of the anesthetic, and the throat reflexes assume their normal function. The pulse should frequently be taken as a rapid pulse means bleeding. When the reflexes return watch the patient for swallowing which may mean swallowing blood. By such care only can such a calamity be averted.

Although death shortly after the operation occurs very seldom, still, two cases that I know unfortunately happened in a very short space of time in the summer of 1919. If this paper should succeed in preventing one single death in many, many years to come, my work will be very well compensated.

616 Madison Avenue.

## THE PATULOUS EUSTACHIAN TUBE.

HAROLD M. HAYS, M.D., F. A. C. S.,  
New York.

It is regrettable that Nature should have created us in such a way that our hearing acuity is dependent upon a little tube which runs from the nasal cavity to the middle ear. This tube is so small that when it is covered with normal mucous membrane it is difficult to pass the finest piano wire into it and only opens up to allow air to enter the middle ear during the act of swallowing. We might say that the size of this tube is in inverse proportion to the amount of harm it can cause. Yet if the tube is too large or too patulous it causes just as much mischief as it does when it is too small.

Some people are gifted with extremely sensitive ears. I do not mean by this that their hearing is more acute but that the "equilibrium" of the ears is frequently disturbed. A moderate blowing of the nose, for example, will make their ears feel stuffy and any cold in the head will make them feel that their own voices are echoes. They have to be particularly careful at all times that they don't send infected secretions from the nasopharynx into their ears.

I know that it is the universal opinion that so-called catarrhal deafness, better termed progressive deafness, is caused by a stenosed Eustachian tube with retraction of the ear drum due to insufficient air pressure. But if one examined carefully he

would be surprised to find that in a number of cases the tube is patulous, in fact wider open than it ought to be and that instead of the ear-drum being retracted, it is relaxed. In such cases the deafness is due to a relaxed ear-drum which is unable to convey the sounds to the auditory nerve. A recent patient who came to me from out of town complaining of a deafness which had extended over a number of years, had consulted various ear specialists who told her that her case was hopeless, that she had hereditary deafness and that she would have to submit to her Fate. One of them had suggested that she practice Politzerization at home—the worst thing she could do. Not one had taken the trouble to discover that she had a relaxed ear-drum. The patency of the tube was evidenced when one asked her to blow her nose. Then, if one placed a sounding tube in her ear and his, he could hear the air whistle through the patulous tube. I found that she was in the habit of holding at least one side of her nose while blowing it with the result that she was making her condition worse instead of better.

What can be done in these cases? In the first place scrupulous care must be taken to keep the nasopharynx clean at all times so that there is no possibility of infection. Secondly, the patient must be taught to blow the nose properly so that no air is forced into the ears. In a certain number of cases one may be able to tighten the ear-drum by suitable medication.

2178 Broadway.

## The Man Young at Fifty

### THE NERVOUS INVALID AS A FACTOR IN SOCIETY.

With Hints to Family and Friends as to Where Certain Mature Derelicts Stand in Social Scheme.

J. MADISON TAYLOR, A.B., M.D.,

PROFESSOR OF PHYSICAL THERAPEUTICS AND DIETETICS,  
MEDICAL DEPARTMENT, TEMPLE UNIVERSITY,  
Philadelphia, Pa.

Every community and most family groups are provided with one or more "nervous invalids." They arise as an outgrowth of civilization, of mature experiences in disorders, having as causes misconceptions of personal relationship to distressing circumstances, and to departures from natural forms of living. Such cases will become fewer and less pronounced when children are taught to use their faculties rightly from the start. Meanwhile here they are, deserving of our best attention. At the same time we, and also the family, deserve to learn what the phenomena signify, where the individual shall be rated, and how he or she shall be evaluated, and how readjusted, restored to the place they formerly occupied or should now occupy in the communal scheme.

A nervous invalid may be described as an individual whose body has fallen into some sort or degree of decrepitude; but whose attention has become so unduly attracted to distressing phenomena as to lose a sense of proportion, or contrasts, of self-balance and of the significances of causes and results. They are the product of an adolescent stage of social evolution. Health is a capacity for automatic adaptation to whatever force pushes one away from one's poise. The physical

invalid is one in whom these self-adjusting mechanisms have been overborne, the sufferer is beyond the safety line. The nervous invalid is one whose power of physical readjustability is stressed or strained and in whom the self-assessment of these disorders—whose points of view, preferences of opinion—push him or her well outside the safety line, the norm of self-adaptation.

In short, there has come about in the nervous invalid a mental obliquity, a bewilderment; things have ceased to be what they seem. Long protracted ailments create a cloud upon the consciousness, a loss of adequate perspective; the personality becomes altered, often warped or even split. The direction of these obliquities lead to certain customary groupings along the line of earlier attributes and type, modified by inclinations, tastes, erroneous impressions, weird beliefs, and the like distorted trends or tropisms.

We may crudely classify these perturbed personalities as of two companies; those who prefer to believe that things are better than they are (the plus ones), and those who elect to regard actualities as worse than they are (the minus ones). Then there appear mixed groups; in some particulars the assumption is plus and in another minus, till the blend becomes obscure beyond comprehension of any except those who make a life study of such problems. These vexed souls serve as the theme of prodigal conjectures by onlookers. They form fertile grounds for romancing, for preferential assessments. Pages in novels are oftentimes covered by more or less elaborate minutiae or interesting descriptions, philosophizing, homilies, dealing with their vagaries of impulse, of thought and deed.

To be sure in every instance of long protracted illness similar obscurations of the actual almost inevit-



ably ensue. Manifestations appear in accord with the mental and emotional attributes of the sufferer; the degrees of self-absorption indulged in as to the nature, character and significance of existing disabilities.

Few physicians fail to number among their clientele a specimen of the genus of greater or less complexity or irremediableness. They act as discouragers of progress; as disturbers of domestic serenity; as a prey for charlatans and a heavy burden on those who support them. They may be classed among luxuries, since only rarely can they contribute to their own support; hence they are seldom found among the poor. In times of stress, anxiety and deprivation, when devotion and self-sacrifice is in the air, nervous invalidism tends to fade away. As the world problems and complications make increasing demands on our energies, our endurance resources and fortitude, fewer nervous invalids will be found.

When the underlying cause is some form of deep-seated or incurable physical disaster or distress, these sufferers excite our profound sympathy, our tenderest solicitude. Many, despite their whimsies, are heroes to whom such paladins as Sir Galahad, Sir Launcelot, Alexander of Macedon, or Julius Caesar are, by comparison, mere horny-handed men-at-arms.

It has been my privilege to know intimately a host of splendid personalities handicapped by cruelly disabling, or soul racking maladies, whom none the less, were bright stars glorifying this workaday world. Individuals have I known who suffered silently, more or less constantly, from unrevealed yet bitter distresses. That some of the more efficient causes were disordered self-interpretation, points of view, exaggerated notions of duty, beliefs based on rare conceptions or ideals or standards over fine or divergent from the herd, detracts in no whit from the noblesse, the splendor of their personalities.

It is more common to meet the other sort; those who confide in many, wailing perpetually, hungry for sympathy, and acting as an exhausting influence upon family, friends and physicians.

These remarks are designed to afford hope, hints and help to persons who fail of adequate relief from real ailments, who do not get well, who regard themselves or are regarded by their families as unfitted to sustain the ordinary burdens of life. They are calculated to furnish contrasts for those others with whom their lives are lived, with whom they come in familiar contact, enabling them to estimate the real nature of exacting conditions. Due consideration must be given to both actualities and possibilities; to the determining how much suffering must be patiently endured, how much and what sort of effort shall be expected to overcome them, and to what extent they can be restored.

In brief, it is as a social factor that the nervous invalid often deserves our chief attention.

"Nervous invalidism" is a blanket phrase commonly employed to cover a multitude of ailments. It is used more by the laity than by physicians (clinicians). Like many another loose term, it has by common usage come to be accepted as descriptive of a state more apparent than real, of a disability wherein the individual suffers more from a morbid state of mind than of body. Both are usually affected and both demand reparation. Some few of these conditions will be found true neuropathies, whose fluctuations of functional vagary, however, never rise high enough to classify them as seriously diseased.

Where fundamental disorders lie less in the breaking down of nerve cell groups (neuron-disintegration) than in morbid dissociations of personality, we may use the word *psychopathy*, so well designed and described by

Boris Sedis. Stimuli or shocks which ordinarily are negligible will in such individuals produce strangely disabling effects. The determining factor is generally disordered elements of consciousness which may disturb the rhythm or flow of normal ideation. Here we enter the realm of the bizarre, the pronouncedly unusual, of astonishing likes and dislikes, of groundless fears, antipathies, hence a state of bewilderment. These "possessions" (rather "being possessed") may persist; only rarely do they dethrone mental balance. A common illustration is the horse, who will serenely ignore a multitude of real dangers and yet becomes terror-stricken at some trifling object.

To secure a key to nervous invalidism we must compare and assess the whole gamut of mental or physical disorders holding in mind that, while these simulate mental dethronement often closely enough, only occasionally does it transpire that the phenomena indicate progressive or incurable mental disease. We must never lose sight of the fact that an insanity will occasionally obtrude, and even then it may be entirely cured.

The subjects of our theme are, in the majority of instances, exemplifications of disorders of the psyche based on physical disorders of varied character and extent (somato-psychoses). Physical factors coexisting may be large or small, curable or not; they may cause pain, or be non-sensory; but no perfect mental restitution can be expected unless morbid physical factors are removed as completely as possible. The sufferer may, and often does become so highly benefited, the cloudings of consciousness may be so rent away, the factors of distress so subordinated, as to constitute a practical recovery, a "clinical cure," and yet there remains an obstinate, sometimes ineradicable structural damage, now negligible, however, in contrast with former states.

Results obtained by judicious treatment are often enough satisfactory to all concerned. Cures are sometimes brilliant. Occasionally so complete is the restitution that an individual becomes renewed, remade, enters upon a stage of being far in advance of former conditions. While the attention of the victim was absorbed by the manifestations, the physical disorders in due time got well, or passed into the realm of the negligibles. When this is achieved the materials for doing so were there; ample dormant powers did exist. Supermen are occasionally evolved from one time invalids. The job of reclamation in strong personalities is well worth all the time and energy expended. Society is the gainer by such skill and persistence.

Let us examine some of the salient characteristics of nervous invalids with a view to understanding with what we have to deal, how to get at the materials for rebuilding a disintegrated person and personality. Their point of view is always wrong, or ill effects would not be so palpable. Difficult enough it is for the prince of philosophers to make clear, acceptable deductions from personal statements and self-appraisements. I've known it tried, by not one but a dozen or more competent experts, and the last was as baffled as the first in his efforts to define and readjust the confronting issues. What was the finality?

Some cases got straightened out and grew into efficient citizens; other progressed and evolved systems of philosophy all their own, with which more robust entities might not agree, though perhaps unable to controvert or to advance a better.

The primary need for these seekers is to show them where they stand in the procession; to set them on as straight a way as their tortuosities of energy permit; to unravel the involved, disproportionate, often contra-

dictory estimates formed of their own state. They deserve, and should always receive, a just appreciation of their very real sufferings. This is too often denied, or grossly misconceived. To be sure, they often exhibit exasperating offensiveness, detestable unreasonableness. Some are blameworthy to an almost unforgivable degree; but the worst are not seldom, upon the last analysis, far less culpable than incapable.

And this, too, by reason of conditions largely removable, and always relievable. Few, when finally emancipated from disabling limitations (of which invariably psychic misinterpretations are the chief) fail to sing paeans of joy, to bless the giver of all good, and to set forth valiantly to readjust themselves to their environment.

A certain number are deeply besotted with selfishness, refuse to be comforted or to be saved, even after being lifted up and out of the slough of despair, but will return again to the sty and relishingly wallow in miseries. A few acquire such evil dispositions they blame their friends and physicians with outrageous injustice and bitterness.

#### Let Us Look Into the Origin of Nervous Invalidism.

It is a preventable condition. Certain forms also are entirely curable, and all are vastly relievable.

The chief cause, common to each and every case, is found in wrong methods of training in childhood; faults in early home influences and education. When the time shall come that all children are taught in the nursery right principles of using their reasoning faculties, as Boris Sidis so clearly shows, there will be few instances of such wrong thinking as creates erroneous manifestations in feeling, thought or act. It becomes a nice problem of encouraging choice of action, of omitting denials or inhibitions along with subtle, tactful, suggestive self-discipline.

When once a child has learned how to direct its own powers, to make and interpret aright its own observations, to justly evaluate happenings, impressions, then will precepts become clear, concepts sound, and emotional poise acquired, helpful in balancing personality, disposition and self-assessment.

Nor are objectors, over-conservative persons who, themselves having never had the priceless advantages of sound early training, fit to judge, nor authorized to deny such an Utopian possibility. It may be a long time before it shall be realized that painstaking prevention of error is worth all the cost; that the most important person in any commonwealth is the expert in primary education. A simple calculation will make plain to any clear-headed business man that the whole of waste, of loss, of blunders and confusion, leading up to anarchy depends in the final count upon how well or ill the budding citizen is grounded in right thinking, right feeling, hence in right doing.

In the problems of mature sufferers under consideration, it is this realm of feeling wherein misinterpretation is chiefly displayed. Our acts are invariably modified by our feelings. Unless these (affective functions and disorders) are rightly estimated, interpreted, our whole course of action becomes thereafter vitiated.

Nervous invalids arise from three major groups of conditions: (1) bodily derangements, protracted disease states, years of disappointment, hopes deferred, desires to return to usefulness indefinitely delayed, horizons narrowed, progressive and pathetic renunciations endured, and the like heartrending embarrassments.

(2) Disturbances of mind-control, howsoever well poised originally; disorders in three main divisions of

the mind—*intellection, feeling, and volition*. These disorders are called the functional psycho-neuroses, hence we have:

(a) Psychasthenia, inability to think rightly, to reason clearly, manifested by morbid fears, anxious anticipations, suspended, timid impulsions, etc.

(b) Neurasthenia, exhibited by morbid subjective sensations, along with undue fatiguability, defective nutrition, deranged body chemistry (metabolism), hence over-susceptibility to any form of fear, anxiety, or stress, or exhaustion.

(3) Hysteria, the distinguishing characteristic of which is a wrong use of willing due to errors all along the line of volition, determination, choice of self-direction, interpretation of states normal or morbid, arising in one's personality.

There is retraction of the field of consciousness, wholly or in part, with abnormal suggestibility constituting both a causal factor and a curative potentiality.

Among the originative factors of nervous invalidism we must also reckon with two types of causal agencies or starting points:

First, anomalies of brain or mind development, and second, acquired structural (toxic) abnormalities, both leading to cellular deterioration, (environmental hypoplasia). The brain-bud may have received a blasting influence through heredity, or suffered early vitiation or deterioration from a host of accidentally hurtful causes. Among the chief of these acquired environmental deteriorations (hypoplasias) are: intoxications (using the term to cover any or all poisons), infections, nutritional or bio-chemical disorders, deprivations, exhaustions and the like. These last may have been initiated in the mother, hence are inherited.

Expectation of repair may demand modification, revision of the personal outlook by reason of existing facts often revealable only as the less serious effects are remedied one by one, hence reaching gradually down to those which must persist, and must be serenely and philosophically accepted.

We may sketch these limitations of cerebral integrity thus:

Proceeding in our search and beginning with the more graphic, obvious and distressing causative phenomena, we may find, as one or other is removed, a residuum of more permanent or irremediable defects. Here our efforts tend to become thwarted, hopes blasted, opinions reversed, by encountering obstructions in the bed-rock of primitive energies or serious alterations in function or structure.

These halting places, like walls of granite through which it is seldom possible to pass with the aid of best remedial agencies, are, for the purposes of our present inquiry comparatively rare. We need not concern ourselves here and now with the worst of these baffling complications. Their solution is sometimes found, and as medical resources grow, may become less and less hopeless.

However, it is entirely within existing possibilities to triumph over so many morbid states, until recently regarded as insuperable, that the quest of rejuvenation for apparently hopeless invalidism is one which can be undertaken with robust confidence.

#### The Way of Salvation and Peace from Nervous Invalidism

We should definitely recognize and make careful use of the fact that emotion and feeling must come into the foreground in solving any of the complex problems of life.



Two methods of approach are open:

(1) Persuasion, advice, re-educational methods,  
(2) Showing to the inquirer that only those methods are applicable in the case under consideration which he can appreciate and appropriate, that every impulse to right action must come from within, and be felt and understood by himself, that he can clear up confusions only by facing the facts, estimating them as they are, or as he is related to them. Otherwise he cannot react properly from them.

Among the primal relationships of the human being to the obligations of life, even though he bears a peculiar and specialized attitude toward them, begin and end with wisely expanded, liberty of choice, leading to effective determinations and actions. The urge of creation is within each of us and almost limitless, hence obstacles and difficulties from within and from without, must be overcome by and through personal effort alone.

Personal development, here and hereafter, is always commensurate with one's own experience and adaptability. Ethical ideals aside we must realize as Bergson says "each individual retains only a certain impetus from the universal vital impulsion and he tends to use this energy in his own interest. In this consists adaptation. The species and the individual thus think only of themselves, whence arises a possible conflict with other forms of life." Again: "Each species of life behaves as if the general movement of life stopped at it instead of passing through it. It thinks only for itself, it lives only for itself. Hence the numberless struggles that we behold in Nature."

In the failure of the individual to adapt himself to his own real needs, or to accept and complete the task before him, and hence to interpret the confusion which results, is constituted the ground for explanation and solution of his particular problems.

Remember also that all mental distresses and disturbances can be traced to one's own errors or choice, act and method; that is to early behavior. In this it may be the innocent victim of circumstances. There is no use in throwing the blame on forefathers. That form of fatalism is popular, attractive and sanctioned by some scientists. The parting of the ways arose from fear or rather timidity, loss of self-confidence. To regain the way, to recover the trail, and the power to pursue the escape, the emancipation, the splendor of self-mastery, the element of fear must be eliminated. And well does it pay to come to this doorway and pass boldly through.

#### Examination of the Seminal Fluid in the Vesiculae Seminales of Cases of General Paralysis.

Among twelve successive cases of general paralysis of the insane, of all ages and in all stages of the disease, as regards cortical decay and destruction, spermatozoa were found in the vesiculae seminales of eleven, and in such a condition as to support the view that they had, just prior to or not long before death, been possessed of vitality, and were capable of fertilizing. The one case in which no spermatozoa were found in the vesicula seminalis might have shown spermatozoa in the other vesicula had it been examined.

The evidence of recent spermatogenesis afforded by examination of the contents of the vesiculae in these 12 cases of general paralysis of the insane, accords with the evidence afforded by histological examination of a much larger number of testes, including these 12 and other cases. One of the common characteristics of general paralysis of the insane is excessive sexual desire, and masturbation is frequent in both the early and demented stage. Yet, although this is so frequent and may extend over years, it has not been sufficient in any one of the larger number of cases examined completely to arrest spermatogenesis or produce a similar regressive atrophy of the seminal tubules to that met with in the great majority of cases of dementia præcox.—(*Brit. Med. Jour.*)

## The Diagnostic Laboratory

Conducted by CHESTER T. STONE, M. D.,  
Brooklyn, N. Y.

### Diagnostic Serum for B. Diphtheriae.

The diagnostic serum used by Mason was developed in a rabbit, its titer being positive in 1:320. This was developed with strain No. 1. All cultures were isolated in pure culture by plating out the original throat culture on Loeffler's blood serum coagulated in Petri dishes. Agglutination reactions were run with fresh saline suspensions treated at 62° C. for fifteen minutes, it being that a lower temperature for that time would not kill the majority of the strains. After setting up, the reactions were run in a water bath at 56° C. for four hours, then kept in an icebox over night, being read in the morning. Controls were run with normal rabbit's serum, dilution 1:20 and with saline.

Virulence for a guinea pig was determined with limited number of strains, it being impossible to determine it in all cases due to a shortage of animals. The tests were performed by the subcutaneous method. Ten strains of organisms, morphologically diphtheroid isolated from various sources, in no case gave any agglutination with the diagnostic serum prepared with stain No. 1 (*B. diphtheriae*). The controls in these cases were also negative. In only one case out of sixty-five strains examined did the organism fail to agglutinate and none of the strains showed any agglutination in normal rabbit's serum in dilution of 1:20 or in saline. (*Military Surgeon, Nov., 1919.*)

### Arsphenamin Injection Followed by Jaundice and Pigmentation of Skin.

Nagaij's patient received an intravenous injection of a diluted solution of 0.3 gm. arsphenamin, and one week later a second intravenous injection of a concentrated solution of 0.6 gm. of neo-arsaminol was given. The jaundice and black pigmentation of the skin developed in about two weeks after the second injection, and the patient had the appearance of one suffering from Addison's disease, though he complained of no subjective symptoms. The jaundice disappeared in three months, and the black pigmentation of the skin, although much improved, was still traceable from deposits of pigment, after seven months. (*Bulletin of Naval Medical Association of Japan, Tokyo, June, 1919.*)

### Early Symptoms of Rabies.

In the eight cases of rabies encountered by Robert in Siam, he noted the constant appearance of intense pruritus as the first and most reliable symptom of the rabies. The region of the bite was all that itched at first, but then the pruritus spread to the entire body and persisted till death. The premonitory phase is characterized by irritability, depression, weeping and this pruritus but none have emphasized its diagnostic importance. (*Presse Medicale, Oct., 1919.*)

### Thyroid Treatment of Alopecia.

Strandberg now has a record of nine cases in which endocrine disturbances seemed to be responsible for malignant patches of alopecia. All were in men except three, but there was nothing to indicate positively endocrine disturbance. Two of the patients had dementia præcox and one signs of

syphilis. Thyroid treatment was applied in every case but only briefly in two; in three of the cases the hair grew again under the thyroid treatment. In one man with dementia præcox the hair began to grow in as the mental condition improved. One woman who was not benefited by the thyroid had her hair drop out again during a pregnancy, and also when menstruation returned. The article is in German. (*Acta Medica Scandinavica, Stockholm, 1919.*)

#### Autovaccine Therapy of Pyodermitis in Young Children.

Guidi reviews the history of pyodermitis autogenous vaccines and describes considerable experience with them at the children's clinic at Florence in the last three years. The micro-organism, usually responsible, is staphylococcus pyogenes aureus; the vaccine treatment was limited to the exceptionally severe and rebellious cases. In the twelve typical cases described, the progressive spread of the skin disease was arrested and the defensive forces reinforced. Most of the twelve children whose case histories are related were infants under 2 years old. One six-months infant had furunculosis, small abscesses over its body and confluent on the scalp. No local measures had seemed to do any good during two months of treatment, but under six injections of the autovaccine the skin cleared up. The last to heal was a vast ulceration on the scalp. (*Rivista di Clinica Pediatrica, Florence, August, 1919.*)

#### The Romanowsky Stain.

Romanese has worked out, he says, a simple and reliable substitute for the Giesma method. The results seem to be the same with it as with the original Giesma fluid, while the ingredients are inexpensive and always at hand. He dissolves 0.75 gm. methylene blue in 50 c.c. of 95 per cent. alcohol and 50 c.c. of glycerin, and adds 50 c.c. of a 10 per cent. solution of sodium carbonate in distilled water, and boils fifteen minutes. It is then removed from the fire and alcohol is added to bring the total amount to 100 c.c. It is then set aside, covered closely, for a week. (*Policlinico, Rome, July 13, 1919.*)

#### Stain for Tubercle Bacilli.

Gasbarrini has long contended that the acids used to decolor the bacilli with the usual technic are too powerful to detract from the effect. To avoid this he uses methylene blue in excess in a solution of 40 c.c. lactic acid in 160 c.c. distilled water, and adds to this at the time of using four parts of alcohol (95 degrees). This both decolors and recolors at the same time, with the finest and most constant results. It has shown up tubercle bacilli in sputum, urine and stools when the Ziehl gave negative findings, and the accuracy of the lactic fluid acid method was confirmed by the course of the cases. The non-acid resisting bacilli can be differentiated more readily, and the whole procedure takes less time than the ordinary technic. (*Policlinico, Rome, July, 1919.*)

#### When to Test the Spinal Fluid in Syphilis.

Ravaut expatiates on the importance of lumbar puncture, both for diagnosis and treatment of syphilis of the nervous system, when it is done at the right moment. At other times it is not instructive and has no therapeutic value. It is then an unnecessary infliction on the patient. In his special study of syphilis since 1902 he has discovered that long before there are clinical manifestations of ner-

vous syphilis, the meninges and vessels are being gradually injured by the spirochaetes. When symptoms from this become evident, the destruction has gone too far for recuperation to be possible.

## Correspondence

### Osmotic Treatment of Stomach Disorders.

To the Editor of THE MEDICAL TIMES:

The relics of barbarism have left an earnest desire to find the mysterious in the curing of the sick. Fortunately we have had true scientists in the past four decades whose efforts have been to simplify and yet make truly efficient the art of healing. That which is really simply and efficient is really scientific and when wonderfully practical it excels. Water is a physiological element, and if used in a physiological way is capable of efficient effects, with no undesirable results.

Our old law of physiology plays little role in the treatment of most physicians. I quote this law of osmosis: "When two fluids are separated from each other by an animal membrane, there is a movement from the heavier to the lighter to equalize their density." I cite, as a crude example of the rapidity with which this osmotic action occurs, the hands of a woman washing clothes. A half-hour's exposure in the water will find her hands almost drained of capillary blood. Yet the blood supply of the hands is in far less degree than the inner walls of the stomach, and osmosis is far more active through mucous membranes than through the cuticle.

Congestive and inflammatory conditions of the mucous membranes of the stomach and duodenum are constant features of all pathological conditions of these organs. Most diseases of the organs are but modifications of vascular disorders. It requires no great stretch of imagination to understand that these vascular disorders are promptly and efficiently controlled by the osmotic action of water.

The efficiency of the osmotic action is increased by two factors: (a) Cold water, by causing hyperemia of the mucosa, affords more rapid osmosis and greater reflex anemia; (b) distilled water by its lessened density in comparison to other waters has stronger osmotic action on the capillaries, while again its affinity for alkalies adds to its efficiency in gouty conditions.

As a very general rule the stomach is empty upon rising, and the direction, "Two glasses of cold water on rising and not to eat for a half hour and take moderate exercise before breakfast," is a long step in the direction of correcting vascular disturbances in the gastric mucosa.

R. L. GRAHAM, M.D.

New York.

### Pulmonary Syphilis.

In a paper from the Department of Medicine of the Jefferson Medical College, E. H. Funk expressed his belief that late syphilis of the lung occurs clinically more often than is generally taught. Diagnosis is difficult and judgment may have to be suspended until lues has been controlled by treatment, when "apical rales" will clear with the associated bronchitis if signs are due to syphilis. The author reports in detail three cases of what he believes were pulmonary syphilis that have come under his own observation. In arriving at a diagnosis the following points are important: (1) the history; (2) signs of syphilis in other organs; (3) the location of the lesion—syphilis usually involves the hilum areas of the bases, unusually rare locations for primary tuberculosis lesions; (4) the persistent absence of tubercle bacilli when signs of advance pulmonary disease are evident; (5) a positive Wassermann reaction when all tests for tuberculosis are negative; (6) certain roentgenographic features which the author gives in detail; and (7) the response to antisyphilitic treatment.—(*Amer. Rev. Tuberc., Vol. III, No. 12.*)

### American Medical Editors' Association.

The fifty-first annual meeting of the American Medical Editors' Association will be held at the Grunewald Hotel, New Orleans, La., on Monday and Tuesday, April 26th and 27th (during the week of the A. M. A. Convention), under the presidency of Dr. Searle Harris, editor of the *Southern Medical Journal*.

A most interesting program has been arranged and every doctor, even remotely interested in medical journalism, will find it to his advantage to attend.

It is advisable to make early reservation of rooms to assure accommodations.



# The Medical Times

A MONTHLY JOURNAL

OF

Medicine, Surgery, and the Collateral Sciences

ESTABLISHED IN 1872

EDITED BY

H. SHERIDAN BAKETEL, A.M., M.D.

ARTHUR C. JACOBSON, M.D.

Associate Editor.

Contributions.—EXCLUSIVE PUBLICATION: Articles are accepted for publication on condition that they are contributed solely to this publication.

When authors furnish drawings or photographs, the publishers will have half tones and line cuts made without expense to the writers.

## SUBSCRIPTION RATES:

(STRICTLY IN ADVANCE)

UNITED STATES  
(Including Alaska, Cuba, Mexico, Porto Rico, Hawaiian and  
Philippine Islands) \$1.00 per year

CANADA  
FOREIGN COUNTRIES IN POSTAL UNION \$1.25 per year

\$1.50 per year

SINGLE COPIES, 15 CENTS

Definite written orders for THE MEDICAL TIMES are required from all subscribers, to whom the journal is thereafter regularly forwarded.

Notify publisher promptly of change of address or if paper is not received regularly.

Remittances for subscriptions will not be acknowledged, but dating on the wrapper will be changed on the first issue possible after receipt of same.

All communications should be addressed to and all checks made payable to the publishers.

## MEDICAL TIMES CO.

ROMAINE PIERSON, President and Treasurer  
H. SHERIDAN BAKETEL, Secretary

95 Nassau Street,

New York

NEW YORK, APRIL, 1920.

## The Physicians' Home.

One of the most irresistible appeals that has recently come to our attention is that seeking to enlist the interest of the profession in The Physicians' Home, designed to permit a comfortable ending of the days of those old physicians and their wives who have been so little mercenary that provision for old age has not been made.

It has been found that such a home is needed, and that should be enough to command support. The matter touches the softest spot in our hearts, and as Dr. Robert T. Morris truly says in his appeal, perhaps many of us will need that home ourselves some day.

It behooves those of us who will not need it to take heed of our brothers who do and will need it.

This is not to be a local institution. It is to be made country-wide as rapidly as interest grows and as finances permit.

You are earnestly requested to not only send your checks, payable to "Physicians' Home," to Dr. Robert T. Morris, 616 Madison Avenue, New York City, but to interest your friends and associates in doing the same.

## Thoughts on Alcohol.

If the influenza epidemic has demonstrated anything it has revealed the ludicrousness of the notion that alcohol is not enormously useful in the treatment of certain diseases.

The truth is that it is indispensable in a large number of individuals when ill. There is a certain type of patient, rather than any particular disease,

that demands alcohol for its narcotic or anociative effect in certain circumstances, and no other drug can take its place.

The writer has been astonished, by the way, whenever he has employed alcohol in the form of a good Burgundy in the management of inoperable and refractory cases of Graves' disease, by the extraordinarily felicitous effects upon the nervous morale. It is more nearly a specific for the nervous perturbation met with in this disease than anything else of which he has knowledge, and this without pernicious effects of any sort. Who is there who would say that we are not in need of a calmate in this disease more effective than the remedies in vogue?

Paradoxically enough, the fanatical reformers whom the writer has known would be, in his judgment, should they suffer from certain illnesses, ideal subjects for the beneficent effects of alcohol.

We confess to a fear that the repeal of prohibition would result in an orgy of excess on the part of users of alcohol exactly comparable to the spirit of the rabid reformers. For obvious psychological reasons the pendulum would swing dangerously far. In the case of alcohol extremes are vicious, whether they be the extremes of the fanatics or those of the bibbers. Our erstwhile alcoholism would be as nothing in the event of a repeal. It is this phase of prohibition which merits our deepest resentment. But a rational settlement of the alcohol question would necessarily be contingent upon a people's good sense, and it is an unfortunate fact that the sane minority has been faced by two great camps representing equally irresponsible extremes.

Perhaps time will heal even this great wound of the body politic. Meantime we may at least be grateful for the passing of the saloon, something, however, which should have been possible of accomplishment without the adoption of idiotic policies.

## "The Wages of a Plumber Would Do."

At a recent meeting of the Academy of Medicine a report on New York dispensaries was presented and discussed. Among other remedies proposed for the "deplorable situation" that the report laid bare was the recommendation that compensation be provided for every physician on the staff, even though only nominal in amount. "The wages of a plumber would do," Dr. Nammack suggested, with appropriately sardonic wit.

Why this expectation of Oslerian medical service for a few hundred dollars a year?

Is it any wonder that the uplifters are astonished when we oppose things like health insurance? Who are we to be so truculent, who have for so long worked as though economic law meant nothing to us?

Why not the wages of a plumber, rather than the pittance of a feeble-minded attendant in a travelling circus?

## Too Late!

Give strong drink unto him that is ready to perish, and wine unto those that be of heavy hearts.

Let him drink, and forget his poverty, and remember his misery no more.

—Proverbs, xxxi, 6-7.

There are two reasons why it has been impracticable in this country to regulate the liquor traffic rationally, instead of wiping it out through prohibition.

One reason has been the brutish inebriety of many bibbers, furnishing gross spectacles and social pathology galore. These abusers of liberty have made decent men and women feel that the source of their viciousness should be dealt a knockout blow.

The other reason has been our licensing system, and this is what we would chiefly draw attention to.

If we had always adhered to the custom initiated by the founders of Plymouth Plantation, there would never have been any trouble. We have licensed pretty nearly anybody with the license money, and made such moneys a great source of state revenue in the past. It is unnecessary to descant upon the character of most of the persons engaged in the liquor traffic that is now in process of dying.

The Old Colonists licensed only the best men of the town when it came to selling rum. You purchased your toddy from your deacon, not from a thug. Under such a system results would naturally be different from those which obtained under the recent dispensation.

Now if our rum sellers today were scions of the old type, who would demur at the trade? The trade was clean in Plymouth.

Too late! Too late! Alas! Alack!

#### A Tell-Tale Phrase.

The special London correspondent of *The Sun and New York Herald* writes under date of February 2 that "Ninepence for fourpence," otherwise the national health insurance scheme, is to be revised both as to contributions and benefits.

"Ninepence and fourpence"—in other words "something for nothing." Such a phrase gives the thing away.

And the whole vicious scheme depends for its practical operation upon exploitation of the medical profession.

Shall we submit and be made the goats of the propaganda now aimed at labor in this country—propaganda which, as in England, is enticing labor by the promise of something for nothing, with the medical profession in the rôle of donors?

The Wallingfords of the uplift are a precious crew, forsooth!

In our opinion the best way to meet the machinations of this gang is by passive resistance. The public hearings on health insurance bills should not be attended, the legislatures should be made to understand that they might as well attempt to force clergymen to aid in the institutionalization of prostitution, and the interests behind the uplift propaganda compelled to realize that in the event of the passage of a health insurance bill it will be unworkable so far as the medical profession is concerned.

No fighting, no hysteria, no talk even. Just passive resistance, like that with which the Finns used to confound the old Czaristic government of Russia.

#### A Travesty on Public Morals.

The Government releases for the treatment of influenza seized liquor in the custody of United States marshals. Contraband booze, in other words, taken away from rum-runners, saves the lives of the sick. The doctors and druggists have in the main dodged the regulations, so succor to the sick depends upon the activity of offenders against the law and diligence on the part of the authorities in seizing it for the hospitals.

Can you beat it?

## Miscellany

CONDUCTED BY ARTHUR C. JACOBSON, M. D.

### God Rest Ye, Merry Gentlemen.

"It seemed that men desired to do no work and strove to seek out other ways whereby men should work for them. . . . And thus, becoming singer of songs to the king, he found a way to do nothing and be fat."

—Jack London, in *"The Strength of the Strong."*

Bernard Shaw declares that the governing classes of England are sometimes quite nice people personally, "but politically they are snobs and ignoramuses. They have inculcated an overwhelming public opinion that working is low and dishonorable and that fighting is obligatory and glorious. They forced their idlers, millionaires and all, into the trenches without an act of Parliament, by sheer force of conviction. The only party that interests me is the party that will force its idlers and all idlers whatsoever by the same irresistible pressure into places where people work."

But Mr. Shaw has himself, by virtue of his wit and other gifts, escaped the plough and the lathe, and works no harder on his plays and other writings than does an English gentleman at his sports. He has no more use for manual labor than the gentleman.

Bernard Shaw belongs, just as much as any member of the English governing classes, to that group of people whose genius consists in making other people take infinite pains. Shaw writes a play, thereby making somebody else paint the scenery for it, or build a theatre to produce it, or print programmes for the audiences. It is merely his way of not being a scene painter, or a mason, or a printer.

In the course of our experiences during the war we discovered a large number of people constitutionally unfit to work hard, or even to work at all. Most of them fell into the neurocirculatory asthenia category. We now know that it is not usually by accident that a man chooses the career of a floor walker, or of a clerk, or of a playwright. It was some biological necessity, in all probability, that made of Shaw a clerk in an Irish real estate office in his younger days, a dramatic critic in the earlier London period, and a playwright and publicist in the later phase. There is much significance in the fact that his father was a shiftless person and that his mother was a singer and musician of some note.

There is probably more physical inefficiency in the United States Senate than among any other class of men active in public life. The Senate may be defined as a haven of refuge for men of short wind unable or unwilling to perform useful work.

We must not be led astray by this matter of neurocirculatory asthenia. The effort syndrome is only one of quite a number of factors operating to produce work dodgers.

The people who have a standing feud with work have always existed. They have left many evidences of their conviction. These tired people wrote the old hymns, in which we encounter such lines as: "O Paradise, O Paradise, who does not long for rest"; "no sorrow can be found, nor grief, nor care, nor toil"; "dear land of rest"; and "then shall my labors have an end, when I thy joys shall see."

\* It has been pointed out by an astute critic that the notion of angels as being everlastingly engaged in harping and singing and standing (loafing) around



a king sitting on a throne implies a wish fulfilment. Heaven is simply a glorified rest cure, in the subconscious minds of our work evaders.

The poets give themselves away badly at times. Swinburne's Garden of Proserpine is simply a place where one sleeps to the point of debauchery. Tennyson dreamt of "beds of amaranth, where all things have rest."

Stewart Paton, of Princeton, in a recent article in the *Medical Record* on the emotional unrest now pervading the world, puts down, among the subjective signs of sanity, pleasure in work. The personality of the psychoneurotic intellectual, on the other hand, does not include this trait.

The psychoneurotic individual lacking opportunity to play the parasite is faced by the practical necessity of developing an intellectual mechanism which will enable him to evade arduous labor of any sort—mental, as a matter of fact, as well as physical. It is a survival device. He is frequently able to make special efforts of moment. This may lead to the production of a play, or the writing of a great poem, or the drafting of a League of Nations, or the introduction of a new sedition bill. Then he takes a good rest. He is spurred to the great effort by grim necessity.

The notion of Shaw and of the Russian Bolsheviks that everybody should be forced to work is an unwittingly ruthless one, for under such a policy many would die of exhaustion, speaking literally. What would the wolves of Wall Street and our sleek clergymen do? And it would prove very costly to the cause of art. What would George Moore do, who admits in one of his books that he was unable to reach the top of an Irish hill that he was climbing with George Russell? What would the celebrated author of "The Man With the Hoe" do? What would actors do? What would the Mark Twains who have to write in bed do? What, in the name of the gods, would Shaw do?

That poem about the man with the hoe, by the way, is chiefly tremendous by reason of the holy horror of labor revealed. It is an overwhelming reaction against the idea of work, and nothing else.

Brander Matthews has said that if Charles Darwin, who was frail in body, had been forced to hard labor to earn his daily bread, it is unlikely, to say the least, that the world would ever have been startled into new life by the sudden explosion of the Darwinian theory. As for Emerson, there exists a naive confession on his part of physical inefficiency.

Under a social system of enforced work the hospitals, municipal lodging houses and retreats for the insane would be overtaxed, to say the least. Our system of muddling along, and permitting the most resourceful of our psychoneurotics to write masterpieces for us, and to govern us, has not worked out so badly, after all.

The occasionally active and fitfully productive psychoneurotic is, when all things have been said, a far more admirable figure than that tired resident of Cape Cod who was asked how he spent his time, and who replied that sometimes he "set and thought" and that at other times he "just set."

Would not the rest of us be unhappy if George Moore ceased to regale us with the prodigious record of his alleged amours, or Bernard Shaw were to stop running that imaginative laundry of his in which all the dirty linen of the world is washed?

God gave all such delightful and divine freaks from the market place, say we.

## Society Proceedings

### The Society of Medical Jurisprudence.

The 35th regular meeting of the Society of Medical Jurisprudence, held at the New York Academy of Medicine, December 8, 1919, was the annual meeting. The minutes of the 34th regular meeting were read and approved and the abstract of the 34th regular meeting of the Board of Trustees was read for information.

An amendment to the Constitution and By-Laws, proposed by John C. West, Esq., at the November meeting, was amended to read as follows:

Amend Article IX, Section 2 of the Constitution and By-Laws by adding the following:—"Any member who has remained in good standing and has paid his dues continuously for twenty-five years, shall on application to the Board of Trustees, retain his membership in the Society without further payment of dues."

The amendment, as amended, was adopted.

The election of officers and trustees for the ensuing year resulted as follows:

President, Nathan B. Van Etten, M.D.

Vice-President, Charles Oakes, Esq.

Treasurer, Charles P. Blaney, Esq.

Corresponding Secretary, Edward E. Hicks, M.D.

Recording Secretary, L. Howard Moss, M.D.

Trustees—Lawyers: Alfred E. Ommen, John C. West, Oscar W. Ehrhorn, Geo. L. Genung. Physicians: Thomas C. Chalmers, Ernest E. Smith, George L. Brodhead, Flavius Packer.

At the scientific session included a paper, "Psychology in Medical Jurisprudence," by Mr. Justice Edward R. Finch, of the New York Supreme Court, with a discussion by Dr. Van Etten, Dr. Chalmers, Mr. Koehl, Dr. Hoag, Dr. Hicks, Mr. Rosenberg, Dr. Zweisohn, and Mr. Solomon, and closed by Judge Finch.

## Diagnosis and Treatment

### A Retrospect of Medicine.

During 1919 much valuable work has been accomplished in the realm of medicine. The debt owing to the laboratory worker is growing yearly greater. It is, however, gratifying to note that in many avenues of medical science, the biochemist, the pathologist and the clinician are uniting their efforts toward the solution of some of the problems that perplex them. In the following summary of the more important advances in medicine only a small portion of the work that has been done, can be reviewed. It is impossible to appraise the value of many contributions until time and continued study have assisted in distinguishing between fact and fancy and have removed the thousand and one doubts that usually accompany new records and fresh observations.

Much ingenuity has been displayed in the consideration of the basic problems of physiology and pathology connected with the fate of protein and carbohydrate in the body. The understanding of the genesis and rôle of acidosis and alkalosis has been greatly extended, although much remains obscure in connection with significance and mechanism of these conditions. The phenomena of sensitization, not only in its narrower sense, but also in its broader, pharmacological aspects, have been greatly elucidated. The perplexities surrounding the subject of tissue response to the parenteral introduction of protein have encouraged investigations which promise to bear good fruit in clinical medicine in the near future. Some additional light has been thrown on the intricate problems of the inter-relations of colloids and salts in the body in health and disease.

Diseases of the cardio-vascular system have been carefully studied. The electro-cardiograph has served to confirm and extend our knowledge in many directions, although no epoch-making discoveries have been made with its aid. Numerous investigators have studied the symptom-complex, known as "disordered action of the heart," both in civil and in military practice. The opinion held by the majority of those competent to judge is that the tachycardia is rarely, if ever, related to hyper-thyroidism and that the condition probably depends on a hyper-excitability of the sympathetic mechanism due to divers causes. It is worthy of note that many clinicians have found suprarenal extract of value in the treatment of this con-

dition, especially in those cases in which vaso-motor symptoms are prominent.

Of the diseases of the lungs, asthma has received the greatest amount of attention. The conviction has gained ground that in many, perhaps all, cases, the symptom-complex is essentially anaphylactic; at times the hypersensitizing antigen is food protein; at other times it may be bacterial or pollen protein. A large number of cases have been reported in which a hypersensitivity has been demonstrated to definite proteins by intra-dermal tests.

Diseases of the kidneys, more especially chronic nephritis, have been the subject of many careful metabolic studies. The tentative classification of uremia into one condition associated with retention of non-protein nitrogen and another in which the retention of chloring is the main factor, has received further support. It has been proved that prolonged protein over-feeding produces chronic interstitial nephritis in animals. In this way, the clinician has received a valuable lesson in dietetics.

The employment of antimony in the treatment of vesical bilharziosis has placed in the hands of the physician a weapon of use in a disease which he was formerly powerless to fight. The most notable advance in connection with diseases of the alimentary tract has been in the endeavor to explain the symptomatology in terms of the underlying nervous mechanism, resulting in a growing precision in diagnosis.

The treatment of diseases of the blood has been reinforced by the results of transfusion. It has been shown that all diseases of the blood, including the leukaemias and pernicious anaemia, are at least temporarily benefited by this process. It has been claimed that subacute sepsis and certain forms of nephritis also react well to transfusion.

The hormonopoeitic organs have attracted a large amount of attention of research students. This is one of the most fascinating and most difficult branches of medicine and the number of its investigators is large. The synthesis of thyrotoxin, the active principle of the thyroid gland, is perhaps the most important physiological advance to be chronicled. The value of X-ray therapy in hyperthyroidism is now well established, though the results are at times disappointing.

There has been a growing tendency to recognize the frequency of the so-called pluri-glandular syndromes, in which more than one internal secretion is deficient and though there has been much inexact and unreliable experimental work in this field of research, there is no doubt that the understanding of much that has hitherto been obscure, will soon be extended.

In the province of vaccine therapy much research has been conducted. This method of treatment still suffers, as it has suffered in the past, at the hands of over-enthusiastic supporters. The later conception of a non-specific response on the part of the body to the introduction of vaccines, in addition to a specific response, has found many adherents. This has led to the parenteral introduction of egg-white and other proteins in the treatment of bacterial infections in which the causal organisms have not yet been isolated. Encouraging reports have been published of the results of this form of treatment in some types of infective arthritis. The matter is still *sub judice*.—(*Med. Jour. of Australia*, Jan. 10, 1920.)

#### Stasis in Children.

Chronic intestinal stasis may be classified as:

##### 1. Congenital.

At some point in the bowel there is a shortness of mesentery relative to the rest, producing a kink most marked in the upright position, that portion of bowel being held up by this short mesentery at a higher level than the rest. This kink forms a control to the easy passage of intestinal contents. These congenital cases are most frequently caused by the mesentery of the appendix taking its origin higher up, and preventing the full descent of the caecum from its position under the liver in early life; they may also be due to the mesentery of the appendix arising from an attachment more towards the middle line and controlling the last few inches of the ileum.

##### 2. Acquired.

The kink here producing the control is caused by the formation of bands or membranes. These acquired bands are often developed in conjunction with the congenital variety.

##### 3. Neuropathic.

This condition is marked by great lengthening of the mesentery and dropping of the bowel, the transverse colon often lying in the pelvis. The length of the transverse and the pelvic colon is increased. Its cause is probably some faulty development of the nerve supply, probably at the point where the splanchnic gives place to the systemic. These cases are those in which the large bowel is functionless, and often calls for colectomy.—(*Brit. Med. Jour.*)

#### Infant Feeding.

J. L. Morse, Boston, in a readable paper on the feeding of normal infants during the second year of life, says that a baby when it is a year old will in most cases be taking whole milk or whole milk with a cereal diluent. According to present fashion it will almost certainly be receiving orange juice in addition and probably be taking some simple cereals and perhaps broth or beef juice. If it is fed properly, it will not, in his opinion, be given anything else. If it is not getting cereals after it is a year old, it should be given them at once. The most digestible cereals are barley, jelly, oat jelly and farina. They should be given, at the start, at two feedings, daily, with milk and salt but with no sugar. The most common cause of indigestion in childhood is sugar. If the infant is not already receiving broth or beef juice, when a year old, not more than 4 ounces at a feeding should be given—chicken, lamb or mutton broth are more digestible than beef. Expressed beef juice is better than any other form, but not more than 2 teaspoonfuls at first, and never more than 2 ounces, and it must not be forgotten that the nutritive value of beef juice is only about half that of an equal quantity of milk. A month or two after broth or beef juice has been started, zwieback, bread crumbs and rice should be given, if the infant has a sufficient number of teeth to chew. It should never be given these things between meals. It is probably advisable to continue the orange juice, especially if the child has a tendency to constipation. Substitutes or additions are prune juice or pulp and baked apple. The orange juice should be given an hour before its regular feeding, and prunes or baked apple at the end of some feeding.

The author thinks it most unwise to begin to give potatoes before the baby is a year and a half old, and this form of starch is the most objectionable. It is also unwise to give eggs before 18 months. At the end of the second year, he adds meat to the diet, and sometimes green vegetables. The most easily digested meats are the white meat of chicken, lamb chop or broth; these should be tried first. Of vegetables, spinach, string beans, peas, asparagus and stewed celery are best. The first three should always be rubbed through a sieve or colander, and the less digestible carrots always mashed. He recognizes that his methods are old-fashioned, and that nature teaches very little. The simple diet he prescribes, he thinks, is amply nutritious, and if the baby takes a quart of milk, daily, it will have no lack of vitamins. The salts that can be reasonably considered are those of calcium, phosphorus and iron. Milk contains sufficient calcium, and a quart of milk contains an excess of the infant's need, and more phosphorus than the baby can use, so much of it will have to be excreted. He has been unable to find figures as to the needs of babies for iron, but the baby taking this simple diet will not be lacking. Bulk is not lacking in this diet, for milk provides a considerable surplus. Orange juice, prune juice, and baked apple are as good laxatives as green vegetables. Morse thinks that the favor of a more liberal diet is largely due to the acceptance without thought or question in these later years of everything that comes from Germany—there are fashions in medicine as well as in dress, and his opinion is in regard to this question of infant diet that the older fashions are better.—(*J. A. M. A.*, Feb. 28, 1920.)

#### Speech Tests as Inevitable to Mental Type Diagnosis the Great Need of Industry.

At the Mental Test Section meeting of the National Society for the Study and Correction of Speech Disorder, a paper was read by Dr. Walter B. Swift, of Boston, upon how to test the mind through the testing of speech.

Dr. Swift said that mental type diagnosis was one of the great needs of industry today. A great deal of the world is at unrest, a great deal of individual dissatisfaction, a great deal of our failures, all depend upon the fact that the wrong man is in the wrong place. The way to put the right man in the right place is to try to discover the sort of the mental type he has. When his mental type is discovered and we know by that just exactly what kind of a man he is, then we will know exactly where he belongs, what he can do, and what he will be able to do in the future.

Speech tests, tests mind in a very minute fashion. Speech tests when properly employed lead us to be able to diagnose the mental type of the individual, when we have once obtained a man's mental type, in a scientific and reliable fashion we are then able to place the right man in the right place. Mental type diagnosis is the solution of Americanism, it is the solution of our industrial problems, it is a part solution of a world-wide unrest and it makes easy the solution of many puzzling educational problems.